

# FMC Corporation

**FMC Corporation**  
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Philadelphia, PA 19103  
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**SUPERFUND DIV.  
REMEDIAL BRANCH  
(6SF-R)**

March 21, 2013

Mr. Lance Nixon, Enforcement Officer  
Superfund Enforcement Assessment Section (6SF-TE)  
U.S. EPA, Region 6  
1445 Ross Avenue  
Dallas, Texas 75202-2733

**RE: Cedar Chemical Corporation Superfund Site, West Helena, Phillips County,  
Arkansas**

Dear Mr. Nixon:

This letter is being submitted on behalf of FMC Corporation ("FMC") in response to the United States Environmental Protection Agency's ("EPA") Information Request, dated January 14, 2013, pursuant to Section 104(e) of CERCLA regarding information related to the above-referenced site. Without waiving any of its rights or privileges, FMC submits the following responses to the Information Request based on its best knowledge and relevant information readily available.

1. The legal entity responding to this request is FMC Corporation incorporated in 1928 under Delaware law and with its principal executive offices at 1735 Market Street, Philadelphia, PA 19103. The telephone number is (215) 299-6000.
2. The person answering on behalf of FMC is

Sabrina Mizrachi  
Environmental Counsel  
FMC Corporation  
1735 Market Street  
Philadelphia, PA 19103  
(215) 299-6935  
(215) 439-3965 (FAX)  
Sabrina.mizrachi@fmc.com

FMC's answers are based on review of documents in FMC's possession located in corporate files and the records of FMC's Environmental Department. FMC is providing copies of the documents used in developing this response.

3. Please address all future correspondence to Sabrina Mizrachi at the above address.

9390167

**FMC**



4. Please explain the business relationship between your company and Cedar Chemical Corporation.

Response to Information Request 4:

FMC Corporation and Cedar Chemical had a contractual relationship between 1993 and 1999 under tolling agreements provided in response to question 6 below.

5. Identify all transactions with the Site owners and/or operators of the Site that resulted in materials being sent to the Site by you for any purpose. Identify and provide all documents related to each transaction, including but not limited to invoices, manifests, shipping papers, bills of lading, receipts, log book entries, trip tickets, work orders, contracts, documents showing the nature of the materials involved, and any EPA and/or State environmental filings or correspondence. For each transaction, identify and state:
  - a. The type and purpose for the transaction;
  - b. A description of the materials involved, including their quantity and chemical content and characteristics;
  - c. Any amounts paid by you in connection with each transaction;
  - d. The date of each transaction; and
  - e. The date the materials were sent to the Site.

Response to Information Request 5a through 5e:

FMC understands that a former operating plant located in Baltimore, Maryland, may have shipped raw materials to Cedar Chemical from approximately 1993 to 1999 on an as-needed basis under the terms of toll manufacturing agreements (provided herewith). The raw materials are listed in the tolling agreements attached in response to Information Request 6. Under the terms of those agreements, the materials were provided by FMC to Cedar Chemical at no cost. The manufacturing processes are FMC proprietary and protected by secrecy agreements signed by Cedar Chemical and FMC. The proposed tolling pricing and terms of payment are specified in each respective tolling agreement. FMC employees consulted during FMC's investigation do not recall the details of any specific transactions with Cedar Chemical. Documentation regarding the shipping of raw materials is no longer available in accordance with FMC's corporate record retention policy.

6. Provide a copy of the tolling agreement between your company and Cedar Chemical, including any restatements, amendments, or other documents. If there are any other tolling agreements, or joint operation agreements, with other companies, provide copies of such agreements.

Response to Information Request 6:

Tolling agreements between FMC Corporation and Cedar Chemical are attached hereto as Attachments 1 through 5.

7. Identify all persons, including you, who may have arranged to have the raw materials mixed at Cedar Chemical Inc. In addition identify the owner of the hazardous materials involved

in each such arrangement.

Response to Information Request 7:

Chester R. Fox, FMC Corporation's former Manufacturing Technical Director, was the employee responsible for toll manufacturing operations for FMC's Agricultural Product Group at the relevant time. Chester is currently deceased. FMC supplied raw materials to Cedar Chemical as specified in the toll manufacturing agreements provided herewith. According to the terms of those agreements, FMC owned all raw materials delivered to Cedar Chemical. Cedar Chemical was required to use all FMC provided raw materials for the production of FMC products only. Cedar Chemical was responsible for retaining a properly qualified and licensed third-party disposer to handle any wastes or residues resulting from production of FMC products or treat aqueous wastes at Cedar Chemical's onsite biological treatment system in lieu of sending to a third party. FMC was required to reimburse Cedar Chemical for any waste disposal fees charged by a third party disposer.

8. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available.

Response to Information Request 8:

FMC's Corporate Record Retention policy sets forth the criteria and standards of the time period in which company records must be retained. FMC has limited documentation for the time period when FMC may have had business dealings with Cedar Chemical. Any additional potentially relevant documents are no longer available to FMC, in accordance with its policy.

Very truly yours,



Sabrina Mizrachi  
Environmental Counsel

Enclosures

## TOLL MANUFACTURING AGREEMENT

This Agreement is made as of this 12<sup>th</sup> day of February, 1993, between FMC CORPORATION, Agricultural Chemical Group, 435 Market Street, Philadelphia, Pennsylvania 19103 ("FMC"), and CEDAR CHEMICAL CORPORATION, 5100 Poplar Avenue, Memphis, Tennessee 38137 ("Toller").

WHEREAS, FMC wishes to have Toller produce DV Acid Chloride, also known as methyl 3-(2,2-dichloroethenyl)-2,2-dimethyl-cyclopropanecarbonyl chloride ("Product"), meeting the specifications hereinafter set forth, and Toller is willing to do so; and

WHEREAS, Toller desires to receive a fee for manufacturing Product;

NOW, THEREFORE, the parties agree as follows:

1. Toll Manufacture and Supply of Materials

(a) Product Order and Delivery.

(i) Pursuant to purchase orders from FMC, Toller will produce Product using FMC's process identified in Exhibit 1 and on the terms and conditions set forth herein, and Toller will deliver Product to FMC's designated carrier, F.O.B. Toller's plant in West Helena, Arkansas. Each purchase order will cover one (1) "run" (whether in one or more batches), and will be deemed accepted by Toller unless FMC receives written notice to the contrary within ten (10) business days of its receipt by Toller.

(ii) Product delivered to FMC's carrier or to tank cars pursuant to Section 1(a)(iv) hereunder shall meet the specifications set forth in Appendix A (the "Specifications"), as determined by the Methods of Analysis described in Appendix B, and shall be packed by Toller in containers, and bearing labels, as specified in Appendix C. Toller has never made Product employing the FMC process, but both parties expect to confirm that the FMC process will result in Product that meets the Specifications. In the event that the Product produced in the first batch of the first purchase order hereunder does not meet the Specifications on Product assay, isomer content and normal process impurities, then both parties shall meet promptly and attempt in good faith to agree either upon (A) a change in the process in Exhibit 1 to allow Product to meet the current Specifications, or, (B) if such a process change is not feasible (due to limits in technology, ability to use a certain process or otherwise) or acceptable to

FMC in its sole discretion, then upon a change in the Specifications in Appendix A that is acceptable to FMC in its sole discretion.

(iii) The weights of shipments hereunder shall be deemed to be as determined by Toller, except in the case of material error, for which appropriate adjustment shall be made. For purposes of this provision a "material error" has occurred only if (A) the net weight of an individual drum weight differs by more than one percent (1%) of its declared net weight, or (B) the combined net weights of ten (10) or more drums differ by more than two tenths of one percent (0.2%) of their declared combined net weight, or (C) the net weight of a single bulk shipment differs by more than five tenths of one percent (0.5%) of its declared net weight, or (D) the combined net weight of any five (5) consecutive bulk shipments differs by more than two tenths of one percent (0.2%) of their declared combined net weight.

(iv) At FMC's option, FMC may make available to Toller one or more tank cars for storage of Product produced at Toller's plant (pending delivery to FMC's designated carrier). Toller shall be responsible (for no additional charge) for holding such Product in a safe and lawful manner until September 15, 1993, unless earlier requested by FMC. It is currently anticipated that Product produced through June of 1993 will be stored on-site in tank cars.

(v) FMC shall order (in one or more purchase orders) a minimum of 200,000 pounds of Product during the term of this Agreement. It is currently expected that this amount will be ordered in two product campaigns, one to run in February 1993 (estimated to be approximately 150,000 pounds) and the other in May 1993 (estimated to be between 100,000 and 200,000 pounds).

(b) Supply of Raw Materials.

(i) FMC Supplied Raw Material. To enable Toller to produce Product, FMC shall, at no cost to Toller and subject to Section 2(b)(ii), supply Toller with the raw materials listed in Section 1(c) hereof (hereinafter referred to collectively as "Raw Materials") conforming to the specifications set forth in Appendix D, reasonably in advance of the delivery dates specified in purchase orders under Section 1(a) hereof, and in amounts at least sufficient to produce the quantities of Product ordered, determined on the basis of the Tolling Ratios (as defined under Section 1(c) hereof). Toller shall use all of the Raw Materials supplied by FMC solely for the production of the Product for the benefit of FMC. To enable it to comply with this section, FMC warrants that it shall maintain (at its Baltimore facility and/or

at Toller's plant) enough Methyl DV Ester to permit continuous supply to Toller during Product production campaigns.

(ii) Toller Supplied Raw Material. In the event Toller supplies any of the Raw Materials, FMC shall reimburse Toller for the actual usage at the net invoiced cost, subject to adjustment as provided in Section 1(d) and in accordance with the other payment terms in Section 2(a); provided, however, that (A) FMC has first agreed in writing that Toller will purchase such Raw Material(s) at a defined cost, and (B) the Raw Material(s) conform to the specifications set forth in Appendix D.

(c) Tolling Ratios. The quantity of Raw Materials delivered by FMC hereunder shall be based initially on the following tolling ratios ("Tolling Ratios"):

<u>Raw Material</u>	<u>Pound per pound of Product (100% basis)</u>
Methyl DV Ester	1.03
Thionyl Chloride	0.56
Caustic Soda, 50%	1.10
Hydrochloric Acid, 32%	0.71
Heptane	0.18
Dimethyl Formamide	0.0045

<u>Raw Material</u>	<u>Cubic feet per pound of Product (100% basis)</u>
Nitrogen	4.8

These Tolling Ratios shall be the anticipated toll conversion ratios for the first ten (10) production batches (which is approximately equal to a total of 50,000 pounds of Product). After the first ten (10) batches of Product by Toller pursuant to this Agreement, the parties shall consult and agree in writing on revised Tolling Ratios and a Waste Brine Ratio (as defined in Section 1(h)(iii)) based on the actual experience of such production. These revised Tolling Ratios and Waste Brine Ratio shall then be the Tolling Ratios and Waste Brine Ratio applicable to all subsequent production during the remainder of the term of this Agreement, unless (in the case of Tolling Ratios) adjusted under Section 1(d).

(d) Additional Compensation/Reimbursement - Tolling Ratios. At the completion of each production run subsequent to the revision of the Tolling Ratios under Sections 1(c) and 2(b), Toller shall conduct an inventory of Raw Materials received from FMC or supplied by Toller and shall account in writing to FMC for the usage of Raw Materials up to such date. If, in the course of any production run hereunder, Toller achieves a tolling ratio for any of the Raw Materials lower than the Tolling Ratio for that Raw Material then applicable in accordance with this Section, FMC shall pay Toller additional compensation in an amount equal to fifty percent (50%) of FMC's and/or Toller's invoiced cost of the Raw Materials saved by virtue of such lower ratio, which ratio shall then become the Tolling Ratio applicable to production pursuant to subsequent purchase orders. If, however, Toller fails to convert any of the Raw Materials (whether delivered by FMC or supplied by Toller) into the quantities of Product specified hereinabove at an efficiency which is at least equal to the Tolling Ratio then applicable hereunder, Toller shall reimburse or credit FMC (as the case may be) for the invoiced cost of such additional quantities of Raw Materials as Toller may use in meeting its obligations hereunder. Notwithstanding the foregoing, it is understood that both in the case of additional compensation to Toller and reimbursement to FMC under this Section 1(d), the Tolling Ratios shall have a plus/minus ( $\pm$ ) one percent (1%) range within which no adjustment shall be made.

(e) FMC Warranty; Limitation; Non-Conforming Raw Material. FMC warrants that the Raw Materials delivered by it hereunder to Toller shall conform to the specifications set forth in Appendix D. FMC makes no other warranty, express or implied, oral or written, respecting the Raw Materials. Toller promptly shall notify FMC of any Raw Material it believes to be non-conforming and shall hold such Raw Material for not less than thirty (30) days after such notification has been given, so that FMC may inspect, verify or provide instructions for disposition (at FMC's expense). If FMC fails to provide such instructions within such thirty-day period, Toller may dispose of the non-conforming materials at FMC's expense, but Toller shall be fully responsible and liable for (and shall indemnify and hold FMC harmless respecting) all consequences of such disposal.

(f) Title. Title to all Raw Materials delivered by FMC hereunder to Toller, and to all Product produced therefrom, shall at all times be and remain vested in FMC. Toller shall keep such Raw Materials and Product physically segregated and clearly identifiable that they are not the property of Toller but belong to another entity (FMC). At no cost to FMC, Toller shall execute and take such other actions as FMC may from time to time reasonably request to evidence FMC's ownership of such Raw Materials and Product. Notwithstanding the preceding provisions

of this Section 1(f), Toller will bear risk of loss of (i) any and all Raw Materials from the time they are delivered to Toller's plant until the production process is complete, and (ii) all Product from the time the production process is completed until the finished Product is placed with a carrier designated under Section 1(a) at Toller's plant (at which time the risk of loss shall pass to FMC).

(g) Other Materials. Except for Raw Materials as provided in Section 1(b)(i) and product drums and labels, Toller will provide at its sole cost and expense all other materials required for the production of Product, including, without limitation, those set forth in Appendix D.

(h) Waste Disposal.

(i) Toller shall retain a properly qualified and licensed third party disposer (approved in advance in writing by FMC, which approval FMC may withhold in its sole discretion) to dispose in a safe and lawful manner all wastes and residues resulting from production of Product. FMC shall have forty-five days after it has been notified in writing of Toller's selection of a third party disposer and of such disposer's disposal fees to indicate whether FMC approves of the selection and the fees, which approval shall not be unreasonably withheld or delayed; and FMC shall be deemed to have approved of such selection and fees if it fails to provide Toller with a written response within the forty-five day period. FMC shall reimburse Toller for any waste disposal fees charged by any approved (or deemed approved) third party disposer to handle such disposal.

(ii) Upon prior written approval of both FMC and Toller, Toller shall treat in its on-site biological treatment system all aqueous waste resulting from production of the Product in lieu of disposal of such waste by a third party. FMC shall reimburse Toller only for any raw materials necessary to pretreat such waste.

(iii) If waste brine generated from production of the Product at any time exceeds 2.5 pounds for each pound of Product produced under this Agreement ("Waste Brine Ratio"), as adjusted under Section 1(c), then Toller shall pay (and not be entitled to reimbursement) for all waste disposal costs and charges related to such excess waste.

(iv) Toller shall provide FMC promptly upon request with copies of all waste related shipping and treatment/disposal documents.



(v) FMC at any time may terminate this Agreement, effective immediately upon written notice to Toller, if Toller violates the provisions of this Section 1(h).

2. Price and Terms of Payment

(a) Initial Toll Fee. As complete consideration for Toller's services and other obligations in producing the first ten (10) batches of Product hereunder, FMC shall pay Toller as follows:

(i) A per diem processing fee ("Fee") of Thirteen Thousand Dollars (\$13,000), assuming that Toller's entire unit #1 is dedicated to and utilized in producing Product on that day;

(ii) A one-time Sixty-Five Thousand Dollar (\$65,000) fee to cover plant preparation, clean-out following production and other incidental services; and

(iii) Reimbursement pursuant to Sections 1(d) and 1(h).

Toller may submit its invoice for each shipment of Product at the time of shipment, and FMC shall pay the amount within thirty (30) days of its receipt of the invoice, subject to reasonable verification by FMC and provided the Product meets the specifications when the invoice is rendered.

(b) Renegotiation of Toll Fee and Tolling Ratios. FMC and Toller will renegotiate the Fee and the Tolling Ratios in good faith after completion of the first ten (10) production batches, to take into account Toller's actual production results. The renegotiated Fee shall be based on a per net pound price, and it and the revised Tolling Ratios immediately after the first ten (10) production batches shall be as mutually agreed to and set forth in a writing signed by FMC and Toller. Either party may terminate this Agreement upon thirty (30) days' prior written notice in the event the parties are unable to agree upon a renegotiated Fee or Tolling Ratios within thirty (30) days after production of the tenth batch of Product.

(c) Capital Related Costs. At the end of the first production run (currently estimated to be about 150,000 pounds), but not later than April 15, 1993, FMC shall reimburse Toller for its actual out-of-pocket capital related costs to modify its equipment to produce Product, but only up to a total of Two Hundred Sixty Thousand Dollars (\$260,000) and subject to verification by FMC.

3. Term

This Agreement shall commence as of the date hereof and shall continue through December 31, 1993, unless sooner terminated as hereinafter provided, or unless extended by mutual consent of the parties.

4. Quality Control, Reports and Inspections

(a) Batch Testing. At its own expense, Toller shall test each batch of Product produced hereunder for conformance to and in accordance with the Specifications and shall promptly submit to FMC a Certificate of Analysis for each batch. Each shipment to FMC shall be accompanied by the results of such analysis. Toller shall retain a sample of every batch of Product produced by it hereunder for at least eight (8) months (or until the termination or expiration of this Agreement, if shorter), during which period it will remain the property of FMC. At the end of the retention period, Toller shall either dispose of the sample as waste (in accordance with Section 1(h)(i)), or return it to FMC if so requested.

(b) Record Maintenance; Reports. Toller will maintain complete and accurate records for Raw Materials and Product, quality control, sampling and testing, storage of Raw Materials and Product, and other matters pertaining to this Agreement (collectively the "Records"). For any month during which Toller produces any Product, Toller shall provide FMC with verbal production status reports throughout the month upon FMC's request and with a monthly written production report by the fifth day of the next calendar month, which shall report pounds of Raw Materials received, used, and held in inventory by Toller, and pounds of Product produced and shipped or held in inventory by Toller, in the preceding month. In addition, Toller shall, on request, provide FMC with production records for each individual batch of Product, indicating materials used, pounds of Product produced, analytical data for process and product streams and major operating conditions. Toller represents and warrants to FMC that all Records to be maintained and reports to be furnished under this Agreement shall be complete and accurate in all material respects.

(c) Inspection Access. At all times during the term hereof, FMC shall have the right to conduct on-site inspections of Toller's premises, to audit Toller's Records pertaining in any way hereto, and to inventory all Product and Raw Materials in Toller's possession. Toller promptly shall permit FMC reasonable access to Toller's plant for such purposes.

(d) Non-conforming Batches. If any test performed pursuant to Section 4(a) indicates a failure to conform to the Specifications, Toller promptly shall advise FMC and shall not deliver Product from such batch without the express written consent of FMC. Product which is defective (except if not due to Toller's error or fault) shall be reworked by Toller at its sole cost and expense, if possible and feasible, or shall be promptly destroyed and disposed of by Toller at its sole cost and expense and in accordance with all government laws, rules and regulations. Toller shall reimburse FMC for the value of the Raw Materials used in the Product destroyed, including any transportation and other related charges paid thereon by FMC.

5. Toller's Plant

(a) Representations, Warranties and Covenants. Toller represents, warrants and covenants that:

(i) Toller has obtained all federal, state and local permits, licenses, zoning variances, approvals, certificates and other authorizations necessary for the operation of the plant where the Product will be produced and for Toller to perform its obligations under this Agreement;

(ii) the plant where the Product will be produced is, and at all times during the term hereof shall be, and all wastes arising out of production hereunder will be handled, stored, transported, treated and disposed of, in full compliance with all applicable local, state and federal laws, rules, regulations, ordinances, orders, permits, licenses, zoning variances, approvals, certificates and other authorizations (including, without limitation, those relating to the environment and employee health or safety); and

(iii) Toller has received and is familiar with FMC technical process data for the Product and its manufacture and applicable material safety data sheets; and Toller is familiar with the requirements of applicable safety laws and codes governing specialty chemical manufacture, will follow good manufacturing practices in production, packaging and storing of the Product as generally recognized in the specialty chemical industry and at all times will comply with all applicable local, state and federal laws, rules and regulations governing the production and storage of Product.

(b) Non-compliance Notice. Toller shall notify FMC in writing within five (5) business days of receipt of any notice Toller receives from any authority that it is not in compliance with any applicable environmental, health or safety law, rule, regulation, or other requirement (collectively "Requirements") in any way relating to or involving the Product or to Toller's

manufacture thereof, including, without limitation, the handling, storage, transportation, treatment and disposal of wastes as required by Sections 1(h) and 5(a) hereof. Toller shall also promptly notify FMC in writing of the adoption of any new Requirements of which it becomes aware.

(c) Governmental Inspection. Toller shall promptly notify FMC (in advance, if possible) of any inspection by a representative of the Environmental Protection Agency, the Department of Labor, or any other Federal agency or state or local regulatory agency in any way involving or related to the Product or Raw Materials, or the Product's manufacture, and FMC may, if it so chooses, be present at any such inspection. If FMC cannot or fails to attend any such inspection, representatives of Toller shall provide FMC with all relevant details relating to the inspection.

#### 6. Toller's Product Warranty

(a) Warranty. Toller warrants that all Product delivered pursuant to this Agreement (except for the Product produced in the first batch of the first purchase order, which is separately covered under Section 1(a)(ii)) shall in all respects conform to the Specifications as stated in, and determined in accordance with, Section 1(a) hereof at the time of delivery to the carrier, and shall be delivered free from any valid security interest, lien or encumbrance in favor of any third party.

(b) Remedies. FMC's remedies for breach of the warranty in this Section shall include, without limitation: (i) the reimbursement of the value of the Raw Materials used in the defective Product, including any transportation and other related charges paid thereon by FMC; (ii) the reimbursement of any transportation and other related charges paid by FMC for the defective Product; and (iii) at FMC's option, replacement of the defective Product or reimbursement of the price paid by FMC for its production, it being understood that if FMC requires replacement hereunder it will provide Raw Materials in connection therewith.

#### 7. Indemnity

(a) General. Each party shall indemnify, defend and hold harmless the other party, its officers, directors, employees, representatives and agents, from and against any and all liabilities, damages, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, costs and expenses (including reasonable attorneys' fees), suits, investigations, proceedings, audits, and causes of action brought by third persons (including employees of the indemnified party), resulting from, related to, or arising out of (i) the indemnifying party's (or any

of indemnifying party's officer's employee's, agent's or representative's) negligence or other tortious acts, (ii) any misrepresentation or breach of warranty or nonfulfillment (whether by act or omission to act) of any of the covenants or agreements of the indemnifying party in this Agreement, or (iii) any misrepresentation in or omission from any certificate or document furnished or to be furnished to the indemnified party hereunder.

(b) Specific by Toller. Subject to the General Indemnities in Section 7(a) above, Toller shall indemnify, defend and hold harmless FMC, its officers, directors, employees, representatives and agents, from and against any and all liabilities, damages, response costs, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, cost and expenses (including reasonable attorneys' fees), suits, investigations, proceedings, audits, and causes of action brought by third persons arising under any Environmental Laws (as hereinafter defined) in connection with or in any way relating to: (i) Toller's plant where the Product is produced, or (ii) the Toller's generation, storage, treatment or disposal of any wastes, or reusable or recyclable material, in connection with the manufacture of Product pursuant to this Agreement, unless Toller sent such waste or material to a licensed disposal facility approved in writing by FMC under Section 1(h)(i).

"Environmental Laws" means any and all federal, state, and local statutes, laws (including case law), regulations, ordinances, rules, judgments, orders, decrees, codes, injunctions, permits, or any other federal, state or local restrictions relating to human health, the environment or to emissions, discharges or releases of pollutants, contaminants, Hazardous Substances (as defined in 42 USC §9601(14)) or wastes into the environment including, without limitation, ambient air, surface water, ground water, or land, or otherwise relating to the manufacture, processing, distributions, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, Hazardous Substances or wastes or the investigation, study, clean-up or other remediation thereof.

(c) Conditions of Indemnification. The foregoing indemnification, defense and hold harmless obligations are conditioned upon (i) the indemnified party furnishing to the indemnifying party copies of all notices, complaints and other pleadings and correspondences relating to any of the above bases on which indemnification is sought, within thirty (30) days of its receipt thereof, and (ii) the indemnified party providing all assistance and cooperation reasonably requested by the indemnifying party in connection therewith.

8. Insurance

(a) Casualty. During the term of this Agreement, Toller shall carry worker's compensation (in statutory amounts), employers' and comprehensive general casualty and liability (including product liability) and contractual indemnity liability insurance with minimum limits of \$100,000 per person and \$2,750,000 per occurrence (and \$2,750,000 aggregate) with an insurer or insurers acceptable to FMC, and naming FMC as an additional insured thereunder. Before commencing manufacture hereunder, Toller will provide certificates evidencing such insurance with notations to the effect that FMC will be notified within thirty (30) days of any notice of cancellation, notice of intent to cancel or any material change in the terms and conditions of the policy.

(b) Property. Toller shall maintain in effect such insurance policy or policies as FMC may reasonably request to protect FMC's interest in Raw Materials, materials and Product on Toller's premises, in amounts not less than \$2,500,000 per occurrence (and \$2,500,000 aggregate).

9. Confidential Information

(a) Confidentiality Undertaking.

(i) FMC may choose from time to time to disclose to Toller information (whether oral or written) that is pertinent to the Product and/or the manufacture thereof, and which FMC regards as proprietary and/or confidential ("FMC Proprietary Information"), irrespective of whether Toller has requested such disclosure. Such FMC Proprietary Information shall, to the extent practicable, be disclosed in written or other tangible form and marked to indicate the confidential nature thereof. If otherwise disclosed, FMC shall have the right to summarize the disclosure in writing within thirty (30) days of first disclosure and provide Toller with a copy thereof, and such writing shall constitute prima facie evidence of the fact, scope and nature of such disclosure. Any information disclosed by FMC to Toller prior to the date hereof and constituting "FMC Information" (as defined in that certain Secrecy Agreement between Toller and FMC, dated February 21, 1990) shall be deemed to be included in FMC Proprietary Information for purposes hereof.

(ii) Toller agrees to maintain the FMC Proprietary Information in secrecy and confidence, to prevent its unauthorized publication and/or disclosure to others, and to refrain from using it other than in the performance of its obligations hereunder. For purposes hereof, authorization shall be deemed to exist only upon the written consent of FMC thereto. Toller also agrees that any documents containing proprietary or confidential information, including any working papers or similar documents developed by

Toller in connection with the manufacture, processing or handling of the Product, shall be considered FMC Proprietary Information, and Toller shall execute and deliver such documents or take such other action as FMC may request for purposes of establishing or defending its property rights created hereby. Upon termination of this Agreement, and as requested by FMC, Toller shall deliver to FMC all FMC Proprietary Information, retaining no copies.

(b) Applicability. Toller's covenants in this Section 9 shall apply equally to Cedar Chemical Company and its officers, employees, agents, and other representatives. Moreover, Toller shall limit dissemination of and reveal FMC Proprietary Information only to those of its officers, employees, agents and representatives who have a need to know such information in order to enable it to perform its obligations under this Agreement. Such officers, employees, agents and representatives shall be legally bound by obligations of non-disclosure and non-use of FMC's Proprietary Information which is furnished to Toller hereunder and, if hired by Toller after the date hereof, shall agree in writing to act in accordance with the non-disclosure and non-use terms of this Agreement as fully as if they were parties hereto. Toller shall be responsible for any breach of this Section 9(b) by anyone covered hereunder.

(c) Limitations. This Section 9 shall not apply to any information which: (i) is published or general chemical industry knowledge at the time of disclosure to Toller, or which thereafter becomes published or general chemical industry knowledge other than as a result of breach of this Agreement; (ii) is acquired by Toller, without restrictions of confidentiality or use, from a third person who did not derive the same directly or indirectly from or through FMC and who has a bona fide right to disclose such information; or (iii) can be shown by Toller's written business records to have been known to Toller before its disclosure by FMC.

(d) Confidential Relationship. The provisions of this Section 9 to the contrary notwithstanding, Toller will not in any event, without express written permission from FMC, disclose to any third person: (i) the subject matter of this Agreement; (ii) any work Toller may carry out for FMC in connection with this Agreement; or (iii) the fact of FMC's interest in having another manufacturer manufacture Product for FMC -- except as to any disclosure required by law, provided that Toller has prior thereto given FMC notice of the intended disclosure sufficient to enable FMC to seek a protective order (or other appropriate remedy), if FMC so desires.

(e) Duration of Confidentiality. Toller's obligations of nondisclosure and non-use set forth in this Agreement shall survive for a period of fifteen (15) years following the expiration or termination of this Agreement.

(f) Remedy. Toller specifically agrees that money damages would not be a sufficient remedy for any breach by it of this Section 9 and that FMC shall be entitled to specific performance as a remedy for any such breach. Specific performance shall not be deemed to be the exclusive remedy for any breach by Toller hereunder, but shall be in addition to all other remedies provided by law or equity.

10. Process Improvements and Modifications. In the event that Toller develops, invents or discovers any improvement, modification or change (whether or not the same results in a patent) to the Product or any aspect of the Product production process (hereinafter referred to as an "Improvement"), Toller shall grant to FMC a perpetual (except that in the case of a patent such license shall be for the life of such patent) non-exclusive right and license throughout the world to all aspects of the Improvement, without any further payment by or cost or charge to FMC. Toller will not use any Improvement in fulfilling a purchase order under this Agreement without FMC's prior written consent.

11. Force Majeure

(a) Force Majeure Events. Neither party shall be liable or responsible for failure to perform, or for delay in performing, any obligation hereunder by it (the "affected party") if such delay or failure is caused by Act of God, fire, explosion, accident, interruption of or delay in transportation or shortage or failure of supply of materials or equipment, breakdowns, labor strife, or compliance with any order or regulation of any governmental authority, or any other cause beyond the reasonable control of the affected party.

(b) Consequences of Force Majeure Event. The affected party shall promptly notify the other of the occurrence of any of the foregoing events or circumstances which affects such party's ability to perform hereunder and of the expected duration of such event or circumstances. The affected party shall use reasonable diligence to end or alleviate the effect of such event on its performance. Any quantities of Product subject to purchase orders issued prior to the notice hereunder by the affected party shall be reduced proportionately. If Toller is the affected party, it shall at its own expense return to FMC any unused Raw Materials previously received by Toller for production of such quantities, and shall reimburse FMC for the cost of any Raw Materials delivered to Toller under this Agreement and destroyed or rendered unusable due to any of the events described in Section 11(a) above.



(c) Termination. If any event described in Section 11(a) prevents performance by either party for three (3) consecutive months, the other party may terminate this Agreement at any time after the end of such third month, on at least thirty (30) days' prior written notice to the other.

(d) Shortages. In the event of a shortage or anticipated shortage of labor, raw materials, utilities, fuel or energy to use in the Product covered by this Agreement and/or delay in shipment or delivery occasioned by any of the causes mentioned in Section 11(a), Toller will use its best efforts to allocate equitably the available labor, raw materials, utilities, fuel and energy to use in the Product covered by this Agreement, to Toller's own internal use and to the use in other products. Toller shall not be obligated to make up any deficiencies in Product hereunder due to any such cause except by written agreement of the parties hereto.

12. Assignment

Neither party shall assign this Agreement or any obligations hereunder without the prior written consent of the other party (which consent shall not be unreasonably withheld) and any other purported assignment without such consent shall be void.

13. Patent Infringement

In the event of a claim of patent infringement against Toller or FMC arising out of such party's performance of its obligations under this Agreement, such party shall have the right, at its sole option, to suspend the performance of the alleged infringing activity, without liability or obligation to the other party, until such claim is resolved to its satisfaction. If any such suspension continues for one hundred eighty (180) consecutive days or more, the other party shall have the right to terminate this Agreement at any time after the end of the 180th day, upon at least thirty (30) days' prior written notice.

14. FMC's Marks and Names

Toller shall not register or use any of FMC's marks, names, corporate slogans, logos or packaging designs (or any similar marks, names, corporate slogans, logos or packaging designs) except as specifically approved in writing by FMC in advance. Packaging the Product in the packages specified by FMC for that purpose shall not be considered use for purposes of this Section 14.

15. Termination

In addition to the termination rights provided elsewhere in this Agreement:

(a) Breach. Either party may terminate this Agreement by prior written notice if the other party shall default in the performance of any obligation hereunder and shall fail to remedy such default within thirty (30) days after receipt of such written notice thereof; and

(b) Bankruptcy, Insolvency, etc. Either party may immediately terminate this Agreement by written notice if the other party enters into or is placed in bankruptcy or receivership, becomes insolvent or makes an assignment for the benefit of its creditors.

16. Continuing Obligations

Obligations of either party accruing hereunder prior to the expiration or termination hereof shall survive such expiration or termination; provided, however, that if this Agreement is terminated prior to the end of its term by FMC under any provision of this Agreement or by Toller under any provision of this Agreement other than Section 15(a), then the minimum purchase quantity under Section 1(a)(v) shall not apply to FMC. The provisions of Sections 6, 7 and 10 shall survive indefinitely any expiration or termination of this Agreement, and the provisions of Section 9 shall survive for the period stated in Section 9(e).

17. Waiver

Any party's waiver of any breach, or failure to enforce any of the terms and conditions of this Agreement, at any time, shall not in any way affect, limit or waive such party's right thereafter to enforce and compel strict compliance with every term and condition hereof.

18. Applicable Law

The validity, interpretation and effect of this Agreement will be governed exclusively by the laws of the Commonwealth of Pennsylvania, without regard to its conflict of laws provisions.

19. Arbitration. If a dispute arises between the parties relating to this Agreement, the parties agree to use the following procedure prior to either party pursuing other available remedies:

(a) A meeting shall be held promptly between the parties, attended by individuals with decision-making authority

regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute.

(b) If, within 30 days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will jointly appoint a mutually acceptable neutral person not affiliated with either of the parties (the "neutral"), seeking assistance in such regard from the Center for Public Resources if they have been unable to agree upon such appointment within 40 days from the initial meeting. The fees of the neutral shall be shared equally by the parties.

(c) In consultation with the neutral, the parties will select or devise an alternative dispute resolution procedure ("ADR") by which they will attempt to resolve the dispute, and a time and place for the ADR to be held, with the neutral making the decision as to the procedure and/or place and time (but unless circumstances require otherwise, not later than 60 days after selection of the neutral) if the Parties have been unable to agree on any of such matters within 20 days after initial consultation with the neutral.

(d) The parties agree to participate in good faith in the ADR to its conclusion as designated by the neutral. If the parties are not successful in resolving the dispute through the ADR, then the parties agree that either party may initiate litigation upon seven days written notice to the other party.

## 20. Entirety

This document, including its appendices, constitutes the full understanding of the parties and a complete and exclusive statement of the terms of their agreement on the subject matter hereof. No terms, conditions, understanding or agreement purporting to modify or vary the terms of this Agreement shall be binding unless hereafter made in writing and signed by the party to be bound. No modification shall be effected by the acknowledgment or acceptance of purchase order or shipping instruction forms containing terms or conditions at variance with or in addition to those set forth herein.

## 21. Independent Contractor

In performing its services hereunder, Toller shall act as an independent contractor and shall have no authority to represent or bind FMC.

21. Notices

All notices required or permitted to be given under this Agreement shall be in writing and shall be sent by registered or certified mail and shall be deemed effective when received. Any such notices shall be addressed to the receiving party at such party's address set forth above, or at such other address as may from time to time be furnished by similar notice by either party.

22. Headings.

The captions of the various Sections of this Agreement have been inserted only for convenience of reference, and shall not be deemed to modify, explain, enlarge or restrict any provision of this Agreement or affect construction hereof.

IN WITNESS HEREOF, the parties have executed this Agreement as of the year and date first written above.

CEDAR CHEMICAL CORPORATION

FMC CORPORATION

By: 

Name:

Title: Director of Custom  
Manufacturing

By: 

Donald E. Bissis  
Director of Operations  
Agricultural Chemical Group

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TOLL MANUFACTURING AGREEMENT

This Agreement is made as of this \_\_\_\_\_ day of \_\_\_\_\_ 1993, between FMC CORPORATION, Agricultural Chemical Group, 1735 Market Street, Philadelphia, Pennsylvania 19103 ("FMC"), and CEDAR CHEMICAL CORPORATION, 5100 Poplar Avenue, Memphis, Tennessee 38137 ("Toller").

WHEREAS, FMC wishes to have Toller produce Cypermethrin, also known as cyano (3-phenoxyphenyl) methyl-3-(2,2-dichloro ethenyl)-2,2-dimethyl cyclopropane carboxylate ("Product"), meeting the specifications hereinafter set forth, and Toller is willing to do so; and

WHEREAS, Toller desires to receive a fee for manufacturing Product;

NOW, THEREFORE, the parties agree as follows:

1. Toll Manufacture and Supply of Materials

(a) Product Order and Delivery.

(i) Pursuant to purchase orders from FMC, Toller will produce Product using FMC's process identified in Exhibit 1 and on the terms and conditions set forth herein, and Toller will deliver Product to FMC's designated carrier, F.O.B. Toller's plant in West Helena, Arkansas. Each purchase order will cover one (1) "run" (whether in one or more batches), and will be deemed accepted by Toller unless FMC receives written notice to the contrary within ten (10) business days of its receipt by Toller.

(ii) Product delivered to FMC's carrier or to tank cars pursuant to Section 1(a)(iv) hereunder shall meet the specifications set forth in Appendix A (the "Specifications"), as determined by the Methods of Analysis described in Appendix B, and shall be packed by Toller in containers, and bearing labels, as specified in Appendix C. Toller has never made Product employing the FMC process, but both parties expect to confirm that the FMC process will result in Product that meets the Specifications. In the event that the Product produced in the first batch of the first purchase order hereunder does not meet the Specifications on Product assay, isomer content and normal process impurities, then both parties shall meet promptly and attempt in good faith to agree either upon (A) a change in the process in Exhibit 1 to allow Product to meet the current Specifications, or, (B) if such a process change is not feasible (due to limits in technology, ability to use a certain process or otherwise) or acceptable to

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FMC in its sole discretion, then upon a change in the Specifications in Appendix A that is acceptable to FMC in its sole discretion.

(iii) The weights of shipments hereunder shall be deemed to be as determined by Toller, except in the case of material error, for which appropriate adjustment shall be made. For purposes of this provision a "material error" has occurred only if (A) the net weight of an individual drum weight differs by more than one percent (1%) of its declared net weight, or (B) the combined net weights of ten (10) or more drums differ by more than two tenths of one percent (0.2%) of their declared combined net weight, or (C) the net weight of a single bulk shipment differs by more than five tenths of one percent (0.5%) of its declared net weight, or (D) the combined net weight of any five (5) consecutive bulk shipments differs by more than two tenths of one percent (0.2%) of their declared combined net weight.

(iv) FMC shall order (in one or more purchase orders) a minimum of 100,000 pounds of Product during the term of this Agreement. It is currently estimated that FMC will order approximately 150,000 pounds and that this amount will be ordered in one product campaign to commence in May 1993, with the first 25,000 pounds to be delivered in May and the rest in June.

(b) Supply of Raw Materials.

(i) FMC Supplied Raw Material. To enable Toller to produce Product, FMC shall, at no cost to Toller and subject to Section 1(b)(ii), supply Toller with the raw materials listed in Section 1(c) hereof (hereinafter referred to collectively as "Raw Materials") conforming to the specifications set forth in Appendix D, reasonably in advance of the delivery dates specified in purchase orders under Section 1(a) hereof, and in amounts at least sufficient to produce the quantities of Product ordered, determined on the basis of the Tolling Ratios (as defined under Section 1(c) hereof). Toller shall use all of the Raw Materials supplied by FMC solely for the production of the Product for the benefit of FMC.

(ii) Toller Supplied Raw Material. Toller shall procure any Heptane and Nitrogen necessary to produce Product ordered by FMC and FMC shall reimburse Toller for the actual usage at the net invoiced cost, subject to adjustment as provided in Section 1(d) and in accordance with the other payment terms in Section 2(a). In the event Toller supplies any other of the Raw Materials, FMC shall reimburse Toller as herein provided; provided, however, that (A) FMC has first agreed in writing that Toller will purchase such Raw Material(s) at a defined cost, and (B) the Raw Material(s) conform to the specifications set forth in Appendix D.

(c) Tolling Ratios. The quantity of Raw Materials delivered by FMC hereunder shall be based initially on the following tolling ratios ("Tolling Ratios"):

<u>Raw Material</u>	<u>Pound per pound of Product (100% basis)</u>
Heptane	.092
Meta-Phenoxybenzaldehyde	.512
Sodium Cyanide	.155
Triethylene Diamine	.023
Sodium Carbonate	.100
DV Acid Chloride 40/60	.628
Caustic 100%	.102

<u>Raw Material</u>	<u>Cubic feet per pound of Product (100% basis)</u>
Nitrogen	6.5

These Tolling Ratios shall be the anticipated toll conversion ratios for the first ten (10) production batches (which is approximately equal to a total of 40,000 pounds of Product). After the first ten (10) batches of Product by Toller pursuant to this Agreement, the parties shall consult and agree in writing on revised Tolling Ratios and a Waste Brine Ratio (as defined in Section 1(h)(iii)) based on the actual experience of such production. These revised Tolling Ratios and Waste Brine Ratio shall then be the Tolling Ratios and Waste Brine Ratio applicable to all subsequent production during the remainder of the term of this Agreement, unless (in the case of Tolling Ratios) adjusted under Section 1(d).

(d) Additional Compensation/Reimbursement - Tolling Ratios. At the completion of each production run subsequent to the revision of the Tolling Ratios under Sections 1(c) and 2(b), Toller shall conduct an inventory of Raw Materials received from FMC or supplied by Toller and shall account in writing to FMC for the usage of Raw Materials up to such date. If, in the course of any production run hereunder, Toller achieves a tolling ratio for any of the Raw Materials lower than the Tolling Ratio for that Raw Material then applicable in accordance with this Section, FMC shall pay Toller additional compensation in an amount equal to fifty percent (50%) of FMC's and/or Toller's invoiced cost of the Raw Materials saved by virtue of such lower ratio, which ratio shall then become the Tolling Ratio applicable to production



pursuant to subsequent purchase orders. If, however, Toller fails to convert any of the Raw Materials (whether delivered by FMC or supplied by Toller) into the quantities of Product specified hereinabove at an efficiency which is at least equal to the Tolling Ratio then applicable hereunder, Toller shall reimburse or credit FMC (as the case may be) for the invoiced cost of such additional quantities of Raw Materials as Toller may use in meeting its obligations hereunder. Notwithstanding the foregoing, it is understood that both in the case of additional compensation to Toller and reimbursement to FMC under this Section 1(d), the Tolling Ratios shall have a plus/minus ( $\pm$ ) one percent (1%) range within which no adjustment shall be made.

(e) FMC Warranty; Limitation; Non-Conforming Raw Material. FMC warrants that the Raw Materials delivered by it hereunder to Toller shall conform to the specifications set forth in Appendix D. FMC makes no other warranty, express or implied, oral or written, respecting the Raw Materials. Toller promptly shall notify FMC of any Raw Material it believes to be non-conforming and shall hold such Raw Material for not less than thirty (30) days after such notification has been given, so that FMC may inspect, verify or provide instructions for disposition (at FMC's expense). If FMC fails to provide such instructions within such thirty-day period, Toller may dispose of the non-conforming materials at FMC's expense, but Toller shall be fully responsible and liable for (and shall indemnify and hold FMC harmless respecting) all consequences of such disposal.

(f) Title. Title to all Raw Materials delivered by FMC hereunder to Toller, and to all Product produced therefrom, shall at all times be and remain vested in FMC. Toller shall keep such Raw Materials and Product physically segregated and clearly identifiable that they are not the property of Toller but belong to another entity (FMC). At no cost to FMC, Toller shall execute and take such other actions as FMC may from time to time reasonably request to evidence FMC's ownership of such Raw Materials and Product. Notwithstanding the preceding provisions of this Section 1(f), Toller will bear risk of loss of (i) any and all Raw Materials from the time they are delivered to Toller's plant until the production process is complete, and (ii) all Product from the time the production process is completed until the finished Product is placed with a carrier designated under Section 1(a) at Toller's plant (at which time the risk of loss shall pass to FMC).

(g) Other Materials. Except for Raw Materials as provided in Section 1(b)(i) and product drums and labels, Toller will provide at its sole cost and expense all other materials required for the production of Product, including, without limitation, those set forth in Appendix D.

**(h) Waste Disposal.**

(i) Toller shall retain a properly qualified and licensed third party disposer (approved in advance in writing by FMC, which approval FMC may withhold in its sole discretion) to dispose in a safe and lawful manner all wastes and residues resulting from production of Product. FMC shall have forty-five days after it has been notified in writing of Toller's selection of a third party disposer and of such disposer's disposal fees to indicate whether FMC approves of the selection and the fees, which approval shall not be unreasonably withheld or delayed; and FMC shall be deemed to have approved of such selection and fees if it fails to provide Toller with a written response within the forty-five day period. FMC shall reimburse Toller for any waste disposal fees charged by any approved (or deemed approved) third party disposer to handle such disposal.

(ii) Upon prior written approval of both FMC and Toller, Toller shall treat in its on-site biological treatment system all aqueous waste resulting from production of the Product in lieu of disposal of such waste by a third party. FMC shall reimburse Toller only for any raw materials necessary to pretreat such waste.

(iii) If waste brine generated from production of the Product at any time exceeds that number of pounds for each pound of Product produced under this Agreement ("Waste Brine Ratio"), as determined under Section 1(c), then Toller shall pay (and not be entitled to reimbursement) for all waste disposal costs and charges related to such excess waste. It is understood that the target Waste Brine Ratio is 1.8 pounds of waste per pound of Product produced.

(iv) Toller shall provide FMC promptly upon request with copies of all waste related shipping and treatment/disposal documents.

(v) FMC at any time may terminate this Agreement, effective immediately upon written notice to Toller, if Toller violates the provisions of this Section 1(h).

**2. Price and Terms of Payment**

(a) Initial Toll Fee. As complete consideration for Toller's services and other obligations in producing the first ten (10) batches of Product hereunder, FMC shall pay Toller as follows:

(1) A per diem processing fee ("Fee") of Thirteen Thousand Dollars (\$13,000), assuming that Toller's entire unit #1 is dedicated to and utilized in producing Product on that day;

(ii) A one-time Thirty-Nine Thousand Dollar (\$39,000) fee to cover plant preparation, clean-out following production and other incidental services; and

(iii) Reimbursement pursuant to Sections 1(b)(ii), 1(d) and 1(h).

Toller may submit its invoice for each shipment of Product at the time of shipment, and FMC shall pay the amount within thirty (30) days of its receipt of the invoice, subject to reasonable verification by FMC and provided the Product meets the specifications when the invoice is rendered.

(b) Renegotiation of Toll Fee and Tolling Ratios. FMC and Toller will renegotiate the Fee and the Tolling Ratios in good faith after completion of the first ten (10) production batches, to take into account Toller's actual production results. The renegotiated Fee shall be based on a per net pound price, and it and the revised Tolling Ratios immediately after the first ten (10) production batches shall be as mutually agreed to and set forth in a writing signed by FMC and Toller. Either party may terminate this Agreement upon thirty (30) days' prior written notice in the event the parties are unable to agree upon a renegotiated Fee or Tolling Ratios within thirty (30) days after production of the tenth batch of Product.

(c) Capital Related Costs. At the end of the first production run (currently estimated to be about 150,000 pounds), but not later than June 15, 1993, FMC shall reimburse Toller for its actual out-of-pocket capital related costs to modify its equipment to produce Product, but only up to a total of One Hundred Eighty-three Thousand Dollars (\$183,000) and subject to verification by FMC.

### 3. Term

This Agreement shall commence as of the date hereof and shall continue through December 31, 1993, unless sooner terminated as hereinafter provided, or unless extended by mutual consent of the parties.

### 4. Quality Control, Reports and Inspections

(a) Batch Testing. At its own expense, Toller shall test each batch of Product produced hereunder for conformance to and in accordance with the Specifications and shall promptly submit to FMC a Certificate of Analysis for each batch. Each shipment to FMC shall be accompanied by the results of such analysis. Toller shall retain a sample of every batch of Product produced by it hereunder for at least eight (8) months (or until

the termination or expiration of this Agreement, if shorter), during which period it will remain the property of FMC. At the end of the retention period, Toller shall either dispose of the sample as waste (in accordance with Section 1(h)(i)), or return it to FMC if so requested.

(b) Record Maintenance; Reports. Toller will maintain complete and accurate records for Raw Materials and Product, quality control, sampling and testing, storage of Raw Materials and Product, and other matters pertaining to this Agreement (collectively the "Records"). For any month during which Toller produces any Product, Toller shall provide FMC with verbal production status reports throughout the month upon FMC's request and with a monthly written production report by the fifth day of the next calendar month, which shall report pounds of Raw Materials received, used, and held in inventory by Toller, and pounds of Product produced and shipped or held in inventory by Toller, in the preceding month. In addition, Toller shall, on request, provide FMC with production records for each individual batch of Product, indicating materials used, pounds of Product produced, analytical data for process and product streams and major operating conditions. Toller represents and warrants to FMC that all Records to be maintained and reports to be furnished under this Agreement shall be complete and accurate in all material respects.

(c) Inspection Access. At all times during the term hereof, FMC shall have the right to conduct on-site inspections of Toller's premises, to audit Toller's Records pertaining in any way hereto, and to inventory all Product and Raw Materials in Toller's possession. Toller promptly shall permit FMC reasonable access to Toller's plant for such purposes.

(d) Non-conforming Batches. If any test performed pursuant to Section 4(a) indicates a failure to conform to the Specifications, Toller promptly shall advise FMC and shall not deliver Product from such batch without the express written consent of FMC. Product which is defective (except if not due to Toller's error or fault) shall be reworked by Toller at its sole cost and expense, if possible and feasible, or shall be promptly destroyed and disposed of by Toller at its sole cost and expense and in accordance with all government laws, rules and regulations. Toller shall reimburse FMC for the value of the Raw Materials used in the Product destroyed, including any transportation and other related charges paid thereon by FMC.

## 5. Toller's Plant

(a) Representations, Warranties and Covenants. Toller represents, warrants and covenants that:

(i) Toller has obtained all federal, state and local permits, licenses, zoning variances, approvals, certificates and other authorizations necessary for the operation of the plant where the Product will be produced and for Toller to perform its obligations under this Agreement;

(ii) the plant where the Product will be produced is a registered establishment in compliance with Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended, and the regulations promulgated thereunder ("FIFRA"), and otherwise is and at all times during the term hereof shall be, and all wastes arising out of production hereunder will be handled, stored, transported, treated and disposed of, in full compliance with all applicable local, state and federal laws, rules, regulations, ordinances, orders, permits, licenses, zoning variances, approvals, certificates and other authorizations (including, without limitation, those relating to the environment and employee health or safety);

(iii) Toller shall keep such records and submit such reports as are required by FIFRA and shall provide to FMC copies of all such records and reports promptly upon request; and

(iv) Toller has received and is familiar with FMC technical process data for the Product and its manufacture and applicable material safety data sheets; and Toller is familiar with the requirements of applicable safety laws and codes governing specialty chemical manufacture, will follow good manufacturing practices in production, packaging and storing of the Product as generally recognized in the specialty chemical industry and at all times will comply with all applicable local, state and federal laws, rules and regulations governing the production and storage of Product.

(b) Non-compliance Notice. Toller shall notify FMC in writing within five (5) business days of receipt of any notice Toller receives from any authority that it is not in compliance with any applicable environmental, health or safety law, rule, regulation, or other requirement (collectively "Requirements") in any way relating to or involving the Product or to Toller's manufacture thereof, including, without limitation, the handling, storage, transportation, treatment and disposal of wastes as required by Sections 1(h) and 5(a) hereof. Toller shall also promptly notify FMC in writing of the adoption of any new Requirements of which it becomes aware.

(c) Governmental Inspection. Toller shall promptly notify FMC (in advance, if possible) of any inspection by a representative of the Environmental Protection Agency, the Department of Labor, or any other Federal agency or state or local regulatory agency in any way involving or related to the Product or Raw Materials, or the Product's manufacture, and FMC may, if it

so chooses, be present at any such inspection. If FMC cannot or fails to attend any such inspection, representatives of Toller shall provide FMC with all relevant details relating to the inspection.

#### 6. Toller's Product Warranty

(a) Warranty. Toller warrants that all Product delivered pursuant to this Agreement (except for the Product produced in the first batch of the first purchase order, which is separately covered under Section 1(a)(ii)) shall in all respects conform to the Specifications as stated in, and determined in accordance with, Section 1(a) hereof at the time of delivery to the carrier, and shall be delivered free from any valid security interest, lien or encumbrance in favor of any third party.

(b) Remedies. FMC's remedies for breach of the warranty in this Section shall include, without limitation: (i) the reimbursement of the value of the Raw Materials used in the defective Product, including any transportation and other related charges paid thereon by FMC; (ii) the reimbursement of any transportation and other related charges paid by FMC for the defective Product; and (iii) at FMC's option, replacement of the defective Product or reimbursement of the price paid by FMC for its production, it being understood that if FMC requires replacement hereunder it will provide Raw Materials in connection therewith.

#### 7. Indemnity

(a) General. Each party shall indemnify, defend and hold harmless the other party, its officers, directors, employees, representatives and agents, from and against any and all liabilities, damages, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, costs and expenses (including reasonable attorneys' fees), suits, investigations, proceedings, audits, and causes of action brought by third persons (including employees of the indemnified party), resulting from, related to, or arising out of (i) the indemnifying party's (or any of indemnifying party's officer's employee's, agent's or representative's) negligence or other tortious acts, (ii) any misrepresentation or breach of warranty or nonfulfillment (whether by act or omission to act) of any of the covenants or agreements of the indemnifying party in this Agreement, or (iii) any misrepresentation in or omission from any certificate or document furnished or to be furnished to the indemnified party hereunder.

(b) Specific by Toller. Subject to the General Indemnities in Section 7(a) above, Toller shall indemnify, defend and hold harmless FMC, its officers, directors, employees,

representatives and agents, from and against any and all liabilities, damages, response costs, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, cost and expenses (including reasonable attorneys' fees), suits, investigations, proceedings, audits, and causes of action brought by third persons arising under any Environmental Laws (as hereinafter defined) in connection with or in any way relating to: (i) Toller's plant where the Product is produced, or (ii) the Toller's generation, storage, treatment or disposal of any wastes, or reusable or recyclable material, in connection with the manufacture of Product pursuant to this Agreement, unless Toller sent such waste or material to a licensed disposal facility approved in writing by FMC under Section 1(h)(i).

"Environmental Laws" means any and all federal, state, and local statutes, laws (including case law), regulations, ordinances, rules, judgments, orders, decrees, codes, injunctions, permits, or any other federal, state or local restrictions relating to human health, the environment or to emissions, discharges or releases of pollutants, contaminants, Hazardous Substances (as defined in 42 USC §9601(14)) or wastes into the environment including, without limitation, ambient air, surface water, ground water, or land, or otherwise relating to the manufacture, processing, distributions, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, Hazardous Substances or wastes or the investigation, study, clean-up or other remediation thereof.

(c) Conditions of Indemnification. The foregoing indemnification, defense and hold harmless obligations are conditioned upon (i) the indemnified party furnishing to the indemnifying party copies of all notices, complaints and other pleadings and correspondences relating to any of the above bases on which indemnification is sought, within thirty (30) days of its receipt thereof, and (ii) the indemnified party providing all assistance and cooperation reasonably requested by the indemnifying party in connection therewith.

## 8. Insurance

(a) Casualty. During the term of this Agreement, Toller shall carry worker's compensation (in statutory amounts), employers' and comprehensive general casualty and liability (including product liability) and contractual indemnity liability insurance with minimum limits of \$100,000 per person and \$2,750,000 per occurrence (and \$2,750,000 aggregate) with an insurer or insurers acceptable to FMC, and naming FMC as an additional insured thereunder. Before commencing manufacture hereunder, Toller will provide certificates evidencing such insurance with notations to the effect that FMC will be notified

within thirty (30) days' of any notice of cancellation, notice of intent to cancel or any material change in the terms and conditions of the policy.

(b) Property. Toller shall maintain in effect such insurance policy or policies as FMC may reasonably request to protect FMC's interest in Raw Materials, materials and Product on Toller's premises, in amounts not less than \$2,500,000 per occurrence (and \$2,500,000 aggregate).

## 9. Confidential Information

### (a) Confidentiality Undertaking.

(i) FMC may choose from time to time to disclose to Toller information (whether oral or written) that is pertinent to the Product and/or the manufacture thereof, and which FMC regards as proprietary and/or confidential ("FMC Proprietary Information"), irrespective of whether Toller has requested such disclosure. Such FMC Proprietary Information shall, to the extent practicable, be disclosed in written or other tangible form and marked to indicate the confidential nature thereof. If otherwise disclosed, FMC shall have the right to summarize the disclosure in writing within thirty (30) days of first disclosure and provide Toller with a copy thereof, and such writing shall constitute prima facie evidence of the fact, scope and nature of such disclosure. Any information disclosed by FMC to Toller prior to the date hereof and constituting "FMC Information" (as defined in that certain Secrecy Agreement between Toller and FMC, dated February 21, 1990) shall be deemed to be included in FMC Proprietary Information for purposes hereof.

(ii) Toller agrees to maintain the FMC Proprietary Information in secrecy and confidence, to prevent its unauthorized publication and/or disclosure to others, and to refrain from using it other than in the performance of its obligations hereunder. For purposes hereof, authorization shall be deemed to exist only upon the written consent of FMC thereto. Toller also agrees that any documents containing proprietary or confidential information, including any working papers or similar documents developed by Toller in connection with the manufacture, processing or handling of the Product, shall be considered FMC Proprietary Information, and Toller shall execute and deliver such documents or take such other action as FMC may request for purposes of establishing or defending its property rights created hereby. Upon termination of this Agreement, and as requested by FMC, Toller shall deliver to FMC all FMC Proprietary Information, retaining no copies.



(b) Applicability. Toller's covenants in this Section 9 shall apply equally to Cedar Chemical Company and its officers, employees, agents, and other representatives. Moreover, Toller shall limit dissemination of and reveal FMC Proprietary Information only to those of its officers, employees, agents and representatives who have a need to know such information in order to enable it to perform its obligations under this Agreement. Such officers, employees, agents and representatives shall be legally bound by obligations of non-disclosure and non-use of FMC's Proprietary Information which is furnished to Toller hereunder and, if hired by Toller after the date hereof, shall agree in writing to act in accordance with the non-disclosure and non-use terms of this Agreement as fully as if they were parties hereto. Toller shall be responsible for any breach of this Section 9(b) by anyone covered hereunder.

(c) Limitations. This Section 9 shall not apply to any information which: (i) is published or general chemical industry knowledge at the time of disclosure to Toller, or which thereafter becomes published or general chemical industry knowledge other than as a result of breach of this Agreement; (ii) is acquired by Toller, without restrictions of confidentiality or use, from a third person who did not derive the same directly or indirectly from or through FMC and who has a bona fide right to disclose such information; or (iii) can be shown by Toller's written business records to have been known to Toller before its disclosure by FMC.

(d) Confidential Relationship. The provisions of this Section 9 to the contrary notwithstanding, Toller will not in any event, without express written permission from FMC, disclose to any third person: (i) the subject matter of this Agreement; (ii) any work Toller may carry out for FMC in connection with this Agreement; or (iii) the fact of FMC's interest in having another manufacturer manufacture Product for FMC -- except as to any disclosure required by law, provided that Toller has prior thereto given FMC notice of the intended disclosure sufficient to enable FMC to seek a protective order (or other appropriate remedy), if FMC so desires.

(e) Duration of Confidentiality. Toller's obligations of nondisclosure and non-use set forth in this Agreement shall survive for a period of fifteen (15) years following the expiration or termination of this Agreement.

(f) Remedy. Toller specifically agrees that money damages would not be a sufficient remedy for any breach by it of this Section 9 and that FMC shall be entitled to specific performance as a remedy for any such breach. Specific performance shall not be deemed to be the exclusive remedy for any breach by Toller hereunder, but shall be in addition to all other remedies provided by law or equity.

10. Process Improvements and Modifications. In the event that Toller develops, invents or discovers any improvement, modification or change (whether or not the same results in a patent) to the Product or any aspect of the Product production process (hereinafter referred to as an "Improvement"), Toller shall grant to FMC a perpetual (except that in the case of a patent such license shall be for the life of such patent) non-exclusive right and license throughout the world to all aspects of the Improvement, without any further payment by or cost or charge to FMC. Toller will not use any Improvement in fulfilling a purchase order under this Agreement without FMC's prior written consent.

11. Force Majeure

(a) Force Majeure Events. Neither party shall be liable or responsible for failure to perform, or for delay in performing, any obligation hereunder by it (the "affected party") if such delay or failure is caused by Act of God, fire, explosion, accident, interruption of or delay in transportation or shortage or failure of supply of materials or equipment, breakdowns, labor strife, or compliance with any order or regulation of any governmental authority, or any other cause beyond the reasonable control of the affected party.

(b) Consequences of Force Majeure Event. The affected party shall promptly notify the other of the occurrence of any of the foregoing events or circumstances which affects such party's ability to perform hereunder and of the expected duration of such event or circumstances. The affected party shall use reasonable diligence to end or alleviate the effect of such event on its performance. Any quantities of Product subject to purchase orders issued prior to the notice hereunder by the affected party shall be reduced proportionately. If Toller is the affected party, it shall at its own expense return to FMC any unused Raw Materials previously received by Toller for production of such quantities, and shall reimburse FMC for the cost of any Raw Materials delivered to Toller under this Agreement and destroyed or rendered unusable due to any of the events described in Section 11(a) above.

(c) Termination. If any event described in Section 11(a) prevents performance by either party for three (3) consecutive months, the other party may terminate this Agreement at any time after the end of such third month, on at least thirty (30) days' prior written notice to the other.

(d) Shortages. In the event of a shortage or anticipated shortage of labor, raw materials, utilities, fuel or energy to use in the Product covered by this Agreement and/or

delay in shipment or delivery occasioned by any of the causes mentioned in Section 11(a), Toller will use its best efforts to allocate equitably the available labor, raw materials, utilities, fuel and energy to use in the Product covered by this Agreement, to Toller's own internal use and to the use in other products. Toller shall not be obligated to make up any deficiencies in Product hereunder due to any such cause except by written agreement of the parties hereto.

12. Assignment

Neither party shall assign this Agreement or any obligations hereunder without the prior written consent of the other party (which consent shall not be unreasonably withheld) and any other purported assignment without such consent shall be void.

13. Patent Infringement

In the event of a claim of patent infringement against Toller or FMC arising out of such party's performance of its obligations under this Agreement, such party shall have the right, at its sole option, to suspend the performance of the alleged infringing activity, without liability or obligation to the other party, until such claim is resolved to its satisfaction. If any such suspension continues for one hundred eighty (180) consecutive days or more, the other party shall have the right to terminate this Agreement at any time after the end of the 180th day, upon at least thirty (30) days' prior written notice.

14. FMC's Marks and Names

Toller shall not register or use any of FMC's marks, names, corporate slogans, logos or packaging designs (or any similar marks, names, corporate slogans, logos or packaging designs) except as specifically approved in writing by FMC in advance. Packaging the Product in the packages specified by FMC for that purpose shall not be considered use for purposes of this Section 14.

15. Termination

In addition to the termination rights provided elsewhere in this Agreement:

(a) Breach. Either party may terminate this Agreement by prior written notice if the other party shall default in the performance of any obligation hereunder and shall fail to remedy such default within thirty (30) days after receipt of such written notice thereof; and

(b) Bankruptcy, Insolvency, etc. Either party may immediately terminate this Agreement by written notice if the other party enters into or is placed in bankruptcy or receivership, becomes insolvent or makes an assignment for the benefit of its creditors.

**16. Continuing Obligations**

Obligations of either party accruing hereunder prior to the expiration or termination hereof shall survive such expiration or termination; provided, however, that if this Agreement is terminated prior to the end of its term by FMC under any provision of this Agreement or by Toller under any provision of this Agreement other than Section 15(a), then the minimum purchase quantity under Section 1(a)(v) shall not apply to FMC. The provisions of Sections 6, 7 and 10 shall survive indefinitely any expiration or termination of this Agreement, and the provisions of Section 9 shall survive for the period stated in Section 9(e).

**17. Waiver**

Any party's waiver of any breach, or failure to enforce any of the terms and conditions of this Agreement, at any time, shall not in any way affect, limit or waive such party's right thereafter to enforce and compel strict compliance with every term and condition hereof.

**18. Applicable Law**

The validity, interpretation and effect of this Agreement will be governed exclusively by the laws of the Commonwealth of Pennsylvania, without regard to its conflict of laws provisions.

**19. Arbitration.** If a dispute arises between the parties relating to this Agreement, the parties agree to use the following procedure prior to either party pursuing other available remedies:

(a) A meeting shall be held promptly between the parties, attended by individuals with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute.

(b) If, within 30 days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will jointly appoint a mutually acceptable neutral person not affiliated with either of the parties (the "neutral"), seeking assistance in such regard from the Center for Public Resources if they have been unable to agree upon such appointment within 40 days from the initial meeting. The fees of the neutral shall be shared equally by the parties.

(c) In consultation with the neutral, the parties will select or devise an alternative dispute resolution procedure ("ADR") by which they will attempt to resolve the dispute, and a time and place for the ADR to be held, with the neutral making the decision as to the procedure and/or place and time (but unless circumstances require otherwise, not later than 60 days after selection of the neutral) if the Parties have been unable to agree on any of such matters within 20 days after initial consultation with the neutral.

(d) The parties agree to participate in good faith in the ADR to its conclusion as designated by the neutral. If the parties are not successful in resolving the dispute through the ADR, then the parties agree that either party may initiate litigation upon seven days written notice to the other party.

#### 20. Entirety

This document, including its appendices, constitutes the full understanding of the parties and a complete and exclusive statement of the terms of their agreement on the subject matter hereof. No terms, conditions, understanding or agreement purporting to modify or vary the terms of this Agreement shall be binding unless hereafter made in writing and signed by the party to be bound. No modification shall be effected by the acknowledgment or acceptance of purchase order or shipping instruction forms containing terms or conditions at variance with or in addition to those set forth herein.

#### 21. Independent Contractor

In performing its services hereunder, Toller shall act as an independent contractor and shall have no authority to represent or bind FMC.

#### 21. Notices

All notices required or permitted to be given under this Agreement shall be in writing and shall be sent by registered or certified mail and shall be deemed effective when received. Any such notices shall be addressed to the receiving party at such party's address set forth above, or at such other address as may from time to time be furnished by similar notice by either party.

#### 22. Headings.


The captions of the various Sections of this Agreement have been inserted only for convenience of reference, and shall


not be deemed to modify, explain, enlarge or restrict any provision of this Agreement or affect construction hereof.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the year and date first written above.

CEDAR CHEMICAL CORPORATION

FMC CORPORATION

By:   
Name: Geoffrey L. Pratt  
Title: Director of Custom  
Manufacturing

By:   
Donald E. Bissing  
Director of Operations  
Agricultural Chemical Group



**FMC Corporation**

Agricultural Chemical Group  
1735 Market Street  
Philadelphia Pennsylvania 19103  
215 299 6000



April 19, 1995

Mr. Geoffrey L. Pratt  
Cedar Chemical Corporation  
Suite 2414  
5100 Poplar Avenue  
Memphis, TN 38137

Dear Geoff:

Our two Toll Manufacturing Agreements expired on December 31, 1993. This letter resurrects, amends and extends the following Agreements to December 31, 1996.

1. Toll Manufacturing Agreement for producing Cypermethrin, dated May 1993.
2. Toll Manufacturing Agreement for producing DV Acid Chloride, dated February 12, 1993.

Your letter dated April 12, 1995 outlines the essential business arrangement for the 1995 campaigns and is hereby considered to amend and supplement the respective terms of the above Agreements. To the extent of any conflict, the April 12, 1995 terms will control.

Please signify Cedar's acceptance of the foregoing by signing below and returning one signed original to us. A duplicate has been enclosed for your files.



Geoffrey L. Pratt

- 2 -

April 19, 1995

Geoff, we look forward to another successful tolling project.

Sincerely,

FMC Corporation

*Chester R. Fox*

Chester R. Fox  
Manufacturing Technical Director

Agreed to and Accepted:

Cedar Chemical Corporation

By: *Geoffrey L. Pratt*

Geoffrey L. Pratt

Title: Vice President, Custom Manufacturing

Date: 4/25/95



DCN: 50950003539

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES  
REGULATION OF NEW CHEMICAL SUBSTANCES  
PENDING DEVELOPMENT OF INFORMATION

In the matter of:	)	Premanufacture Notice
	)	Numbers:
	)	
	)	
	)	
	)	
	)	
	)	
FMC Corporation	)	P-93-204
	)	P-94-1870
	)	P-94-1871
	)	P-94-1872
	)	P-94-1873
	)	P-94-1874

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Consent Order, Consent Order for Contract Manufacturer,  
and Determinations Supporting Consent Orders

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CONSENT ORDER

I. TERMS OF MANUFACTURE, IMPORT, PROCESSING,  
DISTRIBUTION IN COMMERCE, USE, AND DISPOSAL  
PENDING SUBMISSION AND EVALUATION  
OF INFORMATION

Cedar Chemical Corporation ("the Contract  
Manufacturer") has entered into a contract with  
FMC ("the Company") to manufacture or import  
exclusively for the Company the chemical substances: [3H-1,2,4  
Triazol-3-one, 2,4-dihydro-5-methyl-2-phenyl-] ("P93-204"); [3H-  
1,2,4 Triazol-3-one, 4-(difloromethyl)-2,4-dihydro-5-methyl-2-  
phenyl-] ("P94-1870"); [3H-1,2,4 Triazol-3-one,2-(4-  
chlorophenyl)-4-(difluoromethyl)-2,4-dihydro-5-methyl-] ("P94-  
1871"); [3H-1,2,4-Triazol-3-one, 2-(2,4-dichlorophenyl)-4-  
(difluoromethyl)-2,4-dihydro-5-methyl-] ("P94-1872"); [3H-1,2,4-  
Triazol-3-one,2-(5-nitro-2,4-dichlorophenyl)-4-(difluoromethyl)-  
2,4-dihydro-5-methyl-] ("P94-1873"); and [3H-1,2,4-Triazol-3-  
one,2-(5-amino-2,4-dichlorophenyl)-4-(difluoromethyl)-2,4-  
dihydro-5-methyl-] ("P94-1874").

As a condition of manufacturing or importing the PMN  
substances for the Company, the Contract Manufacturer is  
prohibited from manufacturing, importing, processing,

distributing in commerce, using, or disposing of the PMN substances for any non-exempt commercial purpose, pending the development of information necessary for a reasoned evaluation of the human health effects and environmental effects of the substances, and the completion of EPA's review of, and regulatory action based on that information except under the following conditions:

PROTECTION IN THE WORKPLACE

(a) During manufacturing, processing, and use of the PMN substances at any site controlled by the Contract Manufacturer, the Contract Manufacturer must establish a program whereby:

(1) As a general rule, engineering and process controls (such as described in paragraph (2) below) are utilized during all processing and packaging operations, if appropriate in the Contract Manufacturer's discretion, as the primary means of minimizing employee exposure to the PMN substances. However, personal protective equipment, as described in subparagraphs (4) through (6) below, must also be used whenever there is a reasonable likelihood of dermal or inhalation exposure.

(2) Engineering and process controls must be designed, installed and maintained in good working order in accordance with standard engineering and good industrial hygiene practice. Examples of engineering and process controls which minimize employee exposure to the PMN substances include, but are not limited to:

(i) automated instrument and control systems for routine process operations;

(ii) use of sealed and contained sampling devices;

(iii) removal of the PMN substances from equipment (purging equipment and piping containing the PMN substances) prior to disassembly during maintenance and repair operations;

(iv) local exhaust ventilation or other process or engineering controls during the packaging of the PMN substances.

(3) A Personal Protective Equipment Program must be established, and must include, at a minimum, the following: proper storage of gloves to minimize contamination with the PMN substances; donning procedures which include a determination that gloves have not been damaged, are not defective, and will reliably provide an impervious barrier during normal and expected conditions of exposure to the PMN substances within the work area; in-use monitoring or inspection during use of gloves to identify limitations of the gloves under conditions such as elevated temperature, and flexing and stressing during use; and procedures for proper disposal of gloves.

(4) Each person who is reasonably likely to be dermally exposed in the work area to the PMN substances through direct handling of the substances or through contact with equipment on which the substances may exist, or because the substances become airborne in a form listed in subparagraph (a)(9) of this section, is provided with, and is required to wear, personal protective equipment that provides a barrier to prevent dermal exposure to

the substances in the specific work area where they are selected for use. Each such item of personal protective equipment must be selected and used in accordance with 29 CFR 1910.132, 1910.133, 1910.138, 1910.139, 1910.140.

(5)(i) The Contract Manufacturer is able to demonstrate that the gloves selected provide an impervious barrier to prevent dermal exposure during normal and expected duration and conditions of exposure within the work area by testing the material used to make the gloves and the construction of the gloves to establish that they will be impervious for the expected duration and conditions of exposure. The testing must subject the gloves to the expected conditions of exposure, including the likely combinations of chemical substances to which the gloves may be exposed in the work area. There must be no permeation of the PMN substance greater than  $15 \mu\text{g/day-cm}^2$  as a daily cumulative total when tested in accordance with the most current version of the American Society for Testing and Materials (ASTM) F739 "Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases" or ASTM F1383 "Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under Conditions of Intermittent Contact".

(ii) For conditions of exposure which are intermittent, gloves may be tested in accordance with the most current version of ASTM F1383 "Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases Under

Conditions of Intermittent Contact," provided the contact time in testing is greater than or equal to the expected duration of dermal contact, and the purge time used in the testing is less than or equal to the expected duration of non-contact during the intermittent cycle of dermal exposure in the workplace. If ASTM F1383 is used for testing, the Contract Manufacturer must submit to the Agency a description of worker activities involving the PMN substances which includes daily frequencies and durations of potential worker exposures.

(iii) The results of all glove permeation testing must be reported in accordance with the most current version of (ASTM) F1194 "Guide for Documenting the Results of Chemical Permeation Testing of Protective Clothing Materials". The Contract Manufacturer must submit all test data to the Agency and must receive written Agency approval for each type of glove tested prior to use of such gloves. (Agency approval of certain gloves for certain PMNs is given in the preamble accompanying this Order. Other gloves may also be approved in the future.) Gloves must be discarded and replaced with such frequency as to ensure that they will reliably provide an impervious barrier to the PMN substances under normal and expected conditions of exposure within the work area. Gloves that have been damaged or are defective shall not be used.

(6) The Contract Manufacturer is able to demonstrate that each item of chemical protective clothing selected, excluding gloves, provides an impervious barrier to prevent dermal exposure



during normal and expected duration and conditions of exposure within the work area by any one or a combination of the following:

(i) Testing the material used to make the chemical protective clothing and the construction of the clothing to establish that the protective clothing will be impervious for the expected duration and conditions of exposure. The testing must subject the chemical protective clothing to the expected conditions of exposure, including the likely combinations of chemical substances to which the clothing may be exposed in the work area. Permeation testing shall be conducted according to the American Society for Testing and Materials (ASTM) F739 "Standard Test Method for Resistance of Protective Clothing Materials to Permeation by Liquids or Gases." Results shall be recorded as a cumulative permeation rate as a function of time, and shall be documented in accordance with ASTM F739 using the format specified in ASTM F1194-89 "Guide for Documenting the Results of Chemical Permeation Testing on Protective Clothing Materials."

(ii) Evaluating the specifications from the manufacturer or supplier of the chemical protective clothing, or of the material used in construction of the clothing, to establish that the chemical protective clothing will be impervious to the PMN substances alone and in likely combination with other chemical substances in the work area.

(7) Each person who is reasonably likely to be exposed by inhalation in the work area to the PMN substances in the form listed in subparagraph (a)(9) of this section, is provided with, and is required to wear, at a minimum, a NIOSH-approved respirator from one of the categories listed in subparagraph (a)(8) of this section, and the respirator is used in accordance with 29 CFR 1910.134 and 30 CFR Part 11 or the equivalent under 42 CFR Part 84.

(8) The following NIOSH-approved respirators meet the minimum requirements for subparagraph (a)(7) of this section:

(i) Category 19C Type C supplied-air respirator operated in pressure demand or continuous mode and equipped with a hood or helmet or tight-fitting facepiece.

(ii) Category 21C air-purifying respirator equipped with a full facepiece and high efficiency particulate filters.

(iii) Category 21C powered air-purifying respirator equipped with a tight-fitting facepiece and high efficiency particulate filters.

(iv) Category 21C powered air-purifying respirator equipped with a loose-fitting hood or helmet and high efficiency particulate filters.

(9) The following form of airborne chemical substances is listed for subparagraphs (a)(4) and (7) of this section:

(i) Dust.

(b) If the PMN substances are present in the work area only as a mixture, the Contract Manufacturer is exempt from the provisions of this Protection in the Workplace section if the combined concentration of the PMN substances in the mixture does not exceed 1.0 percent by weight or volume, or 0.1 percent by weight or volume if paragraph (g) of the Hazard Communication Program section of this Order identifies cancer as a potential human health hazard of the PMN substances. This exemption does not apply if the Contract Manufacturer has reason to believe that during intended use or processing in the work area, the PMN substances in the mixture may be reconcentrated above the 1.0 or 0.1 percent level, whichever is applicable.

#### HAZARD COMMUNICATION PROGRAM

(a) Written hazard communication program. The Contract Manufacturer shall develop and implement a written hazard communication program for the PMN substances in each workplace. The written program will, at a minimum, describe how the requirements of this section for labels, MSDSs, and other forms of warning material will be satisfied. The Contract Manufacturer must make the written hazard communication program available, upon request, to all employees, contractor employees, and their designated representatives. The Contract Manufacturer may rely on an existing hazard communication program, including an existing program established under the Occupational Safety and

Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), to comply with this paragraph provided that the existing hazard communication program satisfies the requirements of this section. The written program shall include the following:

(1) A list of chemical substances known to be present in the work area which are subject to a TSCA section 5(e) consent order signed by the Company or to a TSCA section 5(a)(2) SNUR at 40 C.F.R. Part 721, subpart E. The list must be maintained in each work area where the PMN substances are known to be present and must use the identity provided on the MSDS for the substances required under paragraph (c) of this section. The list may be compiled for the workplace or for individual work areas. If the Contract Manufacturer is required either by another Order issued under section 5(e) of TSCA, or by a TSCA section 5(a)(2) SNUR at 40 CFR Part 721, subpart E, to maintain a list of substances, the lists shall be combined with the list under this subparagraph.

(2) The methods the Contract Manufacturer will use to inform employees of the hazards of non-routine tasks involving the PMN substances (e.g., cleaning of reactor vessels), and the hazards associated with the PMN substances contained in unlabeled pipes in their work area.

(3) The methods the Contract Manufacturer will use to inform contractors of the presence of the PMN substances in the Contract Manufacturer's workplace and of the provisions of this Order if employees of the contractor work in the Contract

Manufacturer's workplace and are reasonably likely to be exposed to the PMN substances while in the Contract Manufacturer's workplace.

(b) Labeling. (1). The Contract Manufacturer shall ensure that each container of the substances in the workplace is labeled in accordance with this subparagraph (b)(1).

(i) The label shall, at a minimum, contain the following information:

(A) A statement of the human health hazards and precautionary measures, identified in paragraph (g) of this section or by the Contract Manufacturer, for the PMN substances.

(B) The identity by which the PMN substances may be commonly recognized.

(C) A statement of the environmental hazards and precautionary measure, identified in paragraph (g) of this section, or by the Contract Manufacturer, for the PMN substances.

(D) A statement of exposure and precautionary measure(s), if any, identified in paragraph (g) of this section, or by the Contract Manufacturer, for the PMN substances.

(ii) The Contract Manufacturer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys information specified by subparagraph

(b)(1)(i) of this section. Any written materials must be readily accessible to the employees in their work areas throughout each work shift.

(iii) The Contract Manufacturer need not label portable containers into which the PMN substances are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.

(iv) The Contract Manufacturer shall not remove or deface an existing label on containers of the PMN substances obtained from persons outside the Contract Manufacturer unless the container is immediately relabeled with the information specified in subparagraph (b)(1)(i) of this section.

(2) The Contract Manufacturer shall ensure that all containers of the substances leaving its workplace for distribution in commerce are labeled in accordance with this subparagraph (b)(2).

(i) The label shall, at a minimum, contain the following information:

(A) The information prescribed in subparagraph (b)(1)(i) of this section.

(B) The name and address of the manufacturer or a responsible party who can provide additional information on the substances for hazard evaluation and any appropriate emergency procedures.

(ii) The label shall not conflict with the requirements of the Hazardous Materials Transportation Act (18

U.S.C. 1801 et. seq.) and regulations issued under that Act by the Department of Transportation.

(3) The label, or alternative forms of warning, shall be legible and prominently displayed.

(4) The label, or alternative forms of warning, shall be printed in English; however, the information may be repeated in other languages.

(5) If the label or alternative form of warning is to be applied to a mixture containing the PMN substances in combination with any other substance that is either subject to another TSCA section 5(e) Order applicable to the Contract Manufacturer, or subject to a TSCA section 5(a)(2) SNUR at 40 CFR Part 721, subpart E, or defined as a "hazardous chemical" under the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1900.1200), the Contract Manufacturer may prescribe on the label, MSDS, or alternative form of warning, the measures to control worker exposure or environmental release which the Contract Manufacturer determines provide the greatest degree of protection. However, should these control measures differ from the applicable measures required under this Order, the Contract Manufacturer must seek a determination of equivalency for such alternative control measures pursuant to 40 CFR 721.30 before prescribing them under this subparagraph (b)(5).

(c) Material Safety Data Sheets. (1) The Contract Manufacturer must obtain or develop an MSDS for the PMN substances.

(2) The MSDS shall contain, at a minimum, the following information:

(i) The identity used on the container labels of the PMN substances under this section, and, if not claimed confidential, the chemical and common name of the PMN substances. If the chemical and common names are claimed confidential, generic chemical names must be used.

(ii) Physical and chemical characteristics of the substances known to the Contract Manufacturer, (e.g., vapor pressure, flash point).

(iii) The physical hazards of the substances known to the Contract Manufacturer, including the potential for fire, explosion, and reactivity.

(iv) The potential human and environmental hazards as specified in paragraph (g) of this section.

(v) Signs and symptoms of exposure, and any medical conditions which are expected to be aggravated by exposure to the PMN substances known to the Contract Manufacturer.

(vi) The primary routes of exposure to the PMN substances.

(vii) Precautionary measures to control worker exposure and/or environmental release required by this Order, or alternative control measures which EPA has determined under 40



CFR 721.30 provide substantially the same degree of protection as the identified control measures.

(viii) Any generally applicable precautions for safe handling and use of the PMN substances which are known to the Contract Manufacturer, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for response to spills and leaks.

(ix) Any generally applicable control measures which are known to the Contract Manufacturer, such as appropriate engineering controls, work practices, or personal protective equipment.

(x) Emergency first aid procedures known to the Contract Manufacturer.

(xi) The date of preparation of the MSDS or of its last revision.

(xii) The name, address, and telephone number of the Contract Manufacturer or another responsible party who can provide additional information on the chemical substances and any appropriate emergency procedures.

(3) If no relevant information is found or known for any given category on the MSDS, the Contract Manufacturer must mark the MSDS to indicate that no applicable information was found.

(4) Where multiple mixtures containing the PMN substances have similar compositions (i.e., the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture) and similar hazards, the Contract

Manufacturer may prepare one MSDS to apply to all of these multiple mixtures.

(5) If the Contract Manufacturer becomes aware of any significant new information regarding the hazards of the PMN substances or ways to protect against the hazards, this new information must be added to the MSDS within 3 months from the time the Contract Manufacturer becomes aware of the new information. If the PMN substances are not being manufactured, imported, processed, or used in the Contract Manufacturer's workplace, the Contract Manufacturer must add the new information to the MSDS before the PMN substances are reintroduced into the workplace.

(6) The Contract Manufacturer must ensure that persons receiving the PMN substances from the Contract Manufacturer are provided an appropriate MSDS with their initial shipment and with the first shipment after an MSDS is revised. The Contract Manufacturer may either provide the MSDS with the shipped containers or send it to the person prior to or at the time of shipment.

(7) The Contract Manufacturer must maintain a copy of the MSDS in its workplace, and must ensure that it is readily accessible during each work shift to employees when they are in their work areas.

(8) The MSDS may be kept in any form, including as operating procedures, and may be designed to cover groups of substances in a work area where it may be more appropriate to

address the potential hazards of a process rather than individual substances. However, in all cases, the required information must be provided for the PMN substances and must be readily accessible during each work shift to employees when they are in their work areas.

(9) The MSDS must be printed in English; however, the information may be repeated in other languages.

(d) Employee information and training. The Contract Manufacturer must ensure that employees are provided with information and training on the PMN substances. This information and training must be provided at the time of each employee's initial assignment to a work area containing the PMN substances and whenever the PMN substances are introduced into the employee's work area for the first time.

(1) The information provided to employees under this paragraph shall include:

(i) The requirements of this section.

(ii) Any operations in the work area where the PMN substances are present.

(iii) The location and availability of the written hazard communication program required under paragraph (a) of this section, including the list of substances required by subparagraph (a)(1) of this section and MSDSs required by paragraph (c) of this section.

(2) The training provided to employees shall include:

(i) Methods and observations that may be used to detect the presence or release of the PMN substances in or from an employee's work area (such as monitoring conducted by the Company, continuous monitoring devices, visual appearance, or odor of the substances when being released).

(ii) The potential human health and environmental hazards of the PMN substances as specified in paragraph (g) of this section.

(iii) The measures employees can take to protect themselves and the environment from the PMN substances, including specific procedures the Contract Manufacturer has implemented to protect employees and the environment from exposure to the PMN substances, including appropriate work practices, emergency procedures, personal protective equipment, engineering controls, and other measures to control worker exposure and/or environmental release required under this Order, or alternative control measures which EPA has determined under 40 CFR 721.30 provide the same degree of protection as the specified control measures.

(iv) The requirements of the hazard communication program developed by the Contract Manufacturer under this section, including an explanation of the labeling system and the MSDS required by this section and guidance on obtaining and using appropriate hazard information.

(e) Low concentrations in mixtures. If the PMN substances are present in the work area only as a mixture, the Contract Manufacturer is exempt from the provisions of this section if the concentration of the PMN substances in the mixture does not exceed 1.0 percent by weight or volume, or 0.1 percent by weight or volume if paragraph (g) of this section identifies cancer as a potential human health hazards of the PMN substances. However, this exemption does not apply if the Contract Manufacturer has reason to believe that during intended use or processing in the work area, the PMN substances in the mixture may be reconcentrated above the 1.0 or 0.1 percent level, whichever is applicable.

(f) Existing hazard communication program. The Contract Manufacturer need not take additional actions if existing programs and procedures satisfy the requirements of this section.

(g) Human health, environmental hazard, exposure, and precautionary statements. The following human health and environmental hazard and precautionary statements shall appear on each label as specified in paragraph (b) and the MSDS as specified in paragraph (c) of this section:

(1) Human health hazard statements. These substances may cause:

(i) internal organ effects.

(ii) developmental effects.

(2) Human hazard precautionary statements. When using these substances:

(i) avoid skin contact.

(ii) avoid breathing the substances.

(iii) avoid ingestion.

(iv) use respiratory protection.

(v) use skin protection.

(3) Environmental hazard statements. These substances may be:

(i) toxic to fish.

(ii) toxic to aquatic organisms.

(4) Environmental hazard precautionary statements. Notice to users:

(i) disposal restrictions apply.

(5) Each human and environmental hazard and precautionary statement on the label prepared pursuant to paragraph (b) of this section must be followed by the statement: "See the MSDS for details."

#### MANUFACTURING

(a)(1) The Contract Manufacturer shall not cause, encourage, or suggest the manufacture or import of the PMN substances by any other person, except the Company.

(2) Subparagraph (a)(1) shall expire 75 days after promulgation of a final significant new use rule ("SNUR") governing the PMN substances under section 5(a)(2) of TSCA unless the Contract Manufacturer is notified on or before that day of an action in a Federal Court seeking judicial review of the SNUR. If the Contract Manufacturer is so notified, subparagraph (a)(1) shall not expire until EPA notifies the Contract Manufacturer in writing that all Federal Court actions involving the SNUR have been resolved and the validity of the SNUR affirmed.

(3) When EPA promulgates a final SNUR for the PMN substances and subparagraph (a)(1) expires in accordance with subparagraph (a)(2), the Contract Manufacturer shall notify each person whom it causes, encourages or suggests to manufacture or import the PMN substances of the existence of the SNUR. Such notification must be in writing and must specifically include all limitations contained in the SNUR which are defined as significant new uses, and which would invoke significant new use notification to EPA for the PMN substances. Such notice must also reference the publication of the SNUR for these PMN substances in either the Federal Register or the Code of Federal Regulations.

#### DISTRIBUTION

(a) The Contract Manufacturer shall distribute the PMN substances only to the Company.

(b)(1) Paragraph (a) of this Distribution section shall expire 75 days after promulgation of a final SNUR for the PMN substances under section 5(a)(2) of TSCA, unless the Company is notified on or before that day of an action in a Federal Court seeking judicial review of the SNUR. If the Company is so notified, paragraph (a) of this Distribution section shall not expire until EPA notifies the Company in writing that all Federal Court actions involving the SNUR have been resolved and the validity of the SNUR affirmed.

(2) When EPA promulgates a final SNUR for the PMN substances and paragraph (a) of this Distribution section expires in accordance with subparagraph (b)(1), the Company shall notify each person to whom it distributes the PMN substances of the existence of the SNUR. Such notification must be in writing and must specifically include all limitations contained in the SNUR which are defined as significant new uses, and which would invoke significant new use notification to EPA for the PMN substances. Such notice must also reference the publication of the SNUR for these PMN substances in either the Federal Register or the Code of Federal Regulations.

(c) If, at any time after commencing distribution in commerce of the PMN substances, the Contract Manufacturer obtains knowledge that a recipient of the PMN substances has engaged in a significant new use of the PMN substances (as defined in 40 CFR Part 721, Subpart E) without submitting a significant new use



notice to EPA, the Contract Manufacturer shall cease supplying the substances to that recipient, unless the Contract Manufacturer is able to document each of the following:

(1) That the Contract Manufacturer has, within 5 working days, notified the recipient in writing that the recipient has engaged in a significant new use of the PMN substances without submitting a significant new use notice to EPA.

(2) That, within 15 working days of notifying the recipient of the noncompliance, the Contract Manufacturer received from the recipient, in writing, a statement of assurance that the recipient is aware of the terms of the significant new use rule for the PMN substances and will not engage in a significant new use without submitting a significant new use notice to EPA.

(3) If, after receiving a statement of assurance from a recipient under subparagraph (b)(2) of this Distribution section, the Contract Manufacturer obtains knowledge that the recipient has again engaged in a significant new use of the PMN substances without submitting a significant new use notice to EPA, the Company shall cease supplying the PMN substances to that recipient, shall notify EPA of the failure to comply, and shall resume supplying the PMN substances to that recipient only upon written notification from the Agency.

RELEASE TO WATER

(a) The Contract Manufacturer is prohibited from any predictable or purposeful release of the PMN substance or any waste stream from manufacturing, processing, or use containing the PMN substances:

(1)(i) Into the waters of the United States if the quotient from the formula:

$$\frac{\text{number of kilograms/day/} \\ \text{site released}}{\text{receiving stream flow} \\ \text{(million liters/day)}} \times 1000 = N \text{ parts per billion}$$

exceeds 5 parts per billion of all the PMN substances combined, when calculated using the methods described in 40 CFR 721.91. However, contrary to 40 CFR 721.91(a)(4), if the waste stream containing the PMN substances will be treated using activated carbon adsorption, then the amount of PMN substances reasonably likely to be removed from the waste stream by such treatment may be subtracted in calculating the number of kilograms released. No more than the following percent removal efficiencies may be attributed to such treatment for each PMN: P93-204, 99%; P94-1870, 98%; P94-1871, 97%; P94-1872, 92%; P94-1873, 90%; P94-1874, 73%.

(ii) In lieu of calculating the quotient in subparagraph (4)(i), monitoring or alternative calculations may be used to predict the surface water concentration expected to result from the intended release of the substance, if the monitoring procedures or calculations have been approved for such purpose by

EPA. EPA will review and act on a written request to approve monitoring procedures or alternative calculations within 90 days after such a request is received. The Agency will inform the Contract Manufacturer of the disposition of such requests in writing and, where a request is denied, will explain the reasons therefore.

## II. RECORDKEEPING

(a) The Contract Manufacturer shall maintain the following records until 5 years after the date they are created and shall make them available for inspection and copying by EPA in accordance with section 11 of TSCA:

### A. RECORDS

- (1) Records documenting the aggregate manufacture and importation volume of the PMN substance and the corresponding dates of manufacture and import;
- (2) Records documenting the names and addresses (including shipment destination address, if different) of all persons outside the site of manufacture or import to whom the Contract Manufacturer directly sells or transfers the PMN substances, the date of each sale or transfer, and the quantity of the substances sold or transferred on such date;
- (3) Records documenting establishment and implementation of a program for the use of any applicable personal protective

equipment required pursuant to the Protection in the Workplace section of this Order;

(4) Records documenting the determinations required by the Protection in the Workplace section of this Order that chemical protective clothing is impervious to the PMN substances;

(5) Records documenting establishment and implementation of the hazard communication program required by the Hazard Communication Program section of this Order;

(6) Copies of labels required under the Hazard Communication Program section of this Order;

(7) Copies of material safety data sheets required by the Hazard Communication Program section of this Order;

(8) Records documenting compliance with any applicable manufacturing, processing, use, and distribution restrictions in the Manufacturing, Processing, Use, and Distribution sections of this Order, including distributees' written agreement to comply with the Distribution section of this Order;

(9) Records documenting establishment and implementation of procedures that ensure compliance with any applicable water discharge limitation in the Release to Water section of this Order.

(10) The Contract Manufacturer shall keep a copy of this Order at each of its sites where the PMN substances are manufactured, imported, processed or used.

B. APPLICABILITY

The provisions of this Recordkeeping Section are applicable only to the Contract Manufacturer, if applicable, and not the Contract Manufacturer's customers.

### III. MODIFICATION AND REVOCATION OF CONSENT ORDER

The Contract Manufacturer may petition EPA at any time, based upon new information on the health effects of, or human exposure to, the PMN substances, to modify or revoke substantive provisions of this Order. The exposures and risks identified by EPA during its review of the PMN substances and the information EPA determined to be necessary to evaluate those exposures and risks are described in the preamble to this Order. However, in determining whether to amend or revoke this Order, EPA will consider all relevant information available at the time the Agency makes that determination, including, where appropriate, any reassessment of the test data or other information that supports the findings in this Order, an examination of new test data or other information or analysis, and any other relevant information.

EPA will issue a modification or revocation if EPA determines that the activities proposed therein will not present an unreasonable risk of injury to health or the environment and will not result in significant or substantial human exposure or substantial environmental release in the absence of data

sufficient to permit a reasoned evaluation of the human health or environmental effects of the PMN substances.

In addition, the Contract Manufacturer may petition EPA at any time to make other modifications to the language of this Order. EPA will issue such a modification if EPA determines that the modification is useful, appropriate, and consistent with the structure and intent of this Order as issued.

IV. EFFECT OF CONSENT ORDER

By consenting to the entry of this Order, the Contract Manufacturer waives its rights to file objections to this Order pursuant to section 5(e)(1)(C) of TSCA, to receive service of this Order no later than 45 days before the end of the review period pursuant to section 5(e)(1)(B) of TSCA, and to challenge the validity of this Order, or modifications made thereto, in any subsequent action. Consenting to the entry of this Order, and agreeing to be bound by its terms, does not constitute an admission by the Contract Manufacturer as to, the facts or conclusions underlying the Agency's determinations in this proceeding. This waiver does not affect any other rights that the Contract Manufacturer may have under TSCA.

Date

July 17, 1996

Charles M. Auer

Charles M. Auer  
Director, Chemical Control Division  
Office of Pollution Prevention  
and Toxics

Date

October 31/1997

Chris M. Ga

Name:

Title:

V. P. of Manufacturing

Contract Manufacturer:

Cedar Chemical Corp.  
Organic Division





FINAL  
ORIGINAL

COPY

## TOLL MANUFACTURING AGREEMENT

This Agreement is made as of this 24<sup>th</sup> day of November, 1997 ("Effective Date"), by and between **FMC CORPORATION**, Agricultural Products Group, 1735 Market Street, Philadelphia, Pennsylvania 19103 ("FMC"), and **CEDAR CHEMICAL CORPORATION**, 5100 Poplar Avenue, Memphis, Tennessee, 38137 ("Cedar")

WHEREAS, FMC wishes to have Cedar produce 1-(2,4-dichloro-5-nitrophenyl)-4-difluoromethyl-4,5-dihydro-3-methyl-1H-1,2,4-triazol-5-one (also known as 5-Nitro) ("Product") meeting the specifications hereinafter set forth, and Cedar is willing to do so for the fees set forth below; and

WHEREAS, Cedar understands that the Product is an essential intermediate needed to enable FMC to make its proprietary herbicide sulfentrazone and that Cedar's ability to reliably produce Product that consistently meets Specifications, in quantities and in accordance with delivery schedules specified by FMC, is critical to FMC's ability to debottleneck its existing Baltimore Plant production and to FMC's decision to enter into this Agreement;

NOW, THEREFORE, intending to be legally bound, the parties agree as follows:

1. Toll Manufacture and Supply of Materials

(a) Product Quantities.

(i) Requirements. FMC hereby orders from Cedar and, subject to the terms and conditions hereof, Cedar shall manufacture for FMC 800,000 pounds of Product (and any Recovered DMF Solvent resulting therefrom) in two uninterrupted production campaigns (i.e., production of Product in a continuous and uninterrupted series of discrete batches) during the term hereof. Subject to the terms and conditions hereof, approximately 300,000 pounds of Product shall be produced by Cedar and delivered to FMC by May 31, 1998 (the "First Campaign") and an additional 500,000 pounds of Product shall be produced by Cedar and delivered to FMC by May 1, 1999 (the "Second Campaign"). The first 100,000 pounds of Product Cedar produces under the First Campaign is hereinafter referred to as the "Trial Campaign". The First and Second Campaigns are hereinafter sometimes referred to individually as "Production Campaign" and collectively as "Production Campaigns".

(ii) Timing. The Trial Campaign shall commence immediately following mechanical completion of the Capital Improvements to Unit No. 1, as defined herein, and commissioning trials (water and/or solvent batching) carried out therein, and production shall continue thereafter until Cedar shall have produced approximately 300,000 pounds of Product, but in no event later than May 31, 1998. The Second Campaign shall be at least six months in duration and shall commence on or about October 1, 1998, but in no event later than November 1, 1998, and shall continue until Cedar shall have produced approximately 500,000 pounds of Product, but in no event later than on or about May 1, 1999.

(iii) Reserved Time for Production Campaigns. Cedar's Unit #1 processing system at the Facility (as defined in Section 1(b)(i) below) and more particularly identified in Exhibit 1 hereto ("Unit #1") shall be dedicated exclusively to production of Product during each Production Campaign scheduled hereunder and shall not be used during that time to produce or process any other product. Cedar will reserve its Unit #1 for exclusive production of Product for FMC during the First Campaign lasting from the start up of the Trial Campaign, to May 31, 1998, inclusive, and also for a six month Second Campaign in the period June 1, 1998 to May 1, 1999, the exact timing to be mutually agreed upon. Each day on which Unit #1 is reserved for production of Product pursuant to this Section 1(a)(iii) is sometimes hereinafter referred to as a "Reserve Day". The parties acknowledge that FMC's damages related to Cedar's breach of this Section 1(a)(iii) reserve obligation will be difficult to ascertain. In the event of such breach, Cedar shall pay FMC as liquidated damages and as its exclusive remedy an amount equal to the then applicable per diem Fee determined in accordance with Section 2(a) below on any day Cedar is in breach of such reserve obligations

(iv) Reduction Due to Governmental Intervention. Should any quantity of Product which FMC currently needs be reduced due to any cancellation, suspension, modification, amendment or revocation (collectively hereinafter referred to as "Registration Action") of any sulfentrazone pesticide registration(s) or tolerance(s) (or particular use(s) authorized thereby), FMC's remaining reimbursement obligation for Capital Costs (as defined in Section 2(d)(ii) below), if any, shall continue unabated, but the parties shall negotiate in good faith towards a mutually acceptable (A) reduction in the remaining quantity of Product to be delivered and number of Reserve Days applicable hereunder, and (B) increase in the Capital Surcharge Fee (as defined in Section 2(d)(ii) below) to account for any such quantity reduction.

(b) Specifications and Delivery.

(i) Cedar will produce all Product and Recovered DMF Solvent to be produced pursuant to Section 1(a) above using FMC's process identified in Exhibit 2 (the "Process") (which shall be treated as FMC Proprietary Information pursuant to Section 9(b) below) and on the terms and conditions set forth herein, and Cedar will deliver Product and Recovered DMF Solvent to FMC's designated carrier, F.O.B. Cedar's plant in West Helena, Arkansas ("Facility"). Risk of loss of Product and Recovered DMF Solvent shall pass to FMC upon such delivery.

(ii) Cedar has never produced Product employing the FMC Process, but FMC expects to confirm that Cedar's utilization of the Process in Unit No. 1 at the Facility will enable Cedar to produce Product and Recovered DMF Solvent that meets the target specifications attached hereto as Appendix A ("Target Specifications"). FMC recognizes that Cedar's undertaking to produce Product meeting the Specifications and in the quantities and at the rates specified herein is dependent upon, and subject to, the ability of the FMC process as employed in Cedar's Unit #1 to perform in accordance with FMC's expectations. In the event that Product and/or Recovered DMF Solvent produced during the Trial Campaign does not consistently meet the applicable Target Specifications, then the parties shall meet promptly and

attempt in good faith to agree either upon (A) a change in the Process to allow Product and/or Recovered DMF Solvent to meet the said Target Specifications or (B) if such a process change is not feasible or acceptable to the parties, then a change in the Target Specifications in Appendix A in conformity with the Product and/or Recovered DMF Solvent produced during the said Trial Campaign or any extension thereof upon which the parties shall agree. The Target Specifications (as and if revised pursuant to this Section 1(b)(ii)(B)) shall become the final Product and Recovered DMF Solvent specifications ("Specifications") applicable to all production occurring after the Trial Campaign. The applicable Methods of Analysis described in Appendix B shall be used to determine whether Product and Recovered DMF Solvent Cedar produces meets the applicable Target Specifications (for all production during the Trial Campaign) or Specifications (for all production after the Trial Campaign).

(iii) Product delivered to FMC's carrier pursuant to Section 1(b)(i) above shall be packed by Cedar in containers, and bearing labels, as specified in Appendix C (collectively, "Containers/Labels")

(iv) The weights of shipments hereunder shall be deemed to be as determined by Cedar, except in the case of material error, for which appropriate adjustment shall be made. For purposes of this provision a "material error" has occurred only if (A) the net weight of an individual drum weight differs by more than one percent (1%) of its declared net weight, or (B) the combined net weights of ten (10) or more drums differ by more than two tenths of one percent (0.2%) of their declared combined net weight, or (C) the net weight of a single bulk shipment differs by more than five tenths of one percent (0.5%) of its declared net weight, or (D) the combined net weight of any five (5) consecutive bulk shipments differs by more than two tenths of one percent (0.2%) of their declared combined net weight.

(c) Supply of Raw Materials

(i) FMC Supplied Raw Material FMC shall be responsible for delivering to the Facility the Raw Materials listed in Section 1(d) hereof (hereinafter referred to collectively as "Raw Materials") in each case accompanied by a Certificate of Analysis (which FMC shall also cause to be faxed to Cedar at time of shipment) at its cost in sufficient quantities to enable Cedar to produce Product in uninterrupted Production Campaigns on each Reserve Day in accordance with the terms hereof, except as to any Raw Materials which the parties agree that Cedar shall procure. FMC supplied Raw Materials shall conform to the raw material specifications set forth in Appendix D ("Raw Material Specifications") FMC shall provide such Raw Materials and Containers/Labels reasonably in advance of the delivery dates specified in Section 1(a) above, and in amounts at least sufficient to produce the quantities of Product ordered, determined on the basis of the Tolling Ratios (as defined under Section 1(d) below). Cedar shall use all the Raw Materials and Containers/Labels supplied by FMC solely for the production of the Product for the benefit of FMC

(ii) Cedar Supplied Raw Material. If Cedar procures any Raw Material necessary to produce Product ordered by FMC, FMC shall reimburse Cedar for the actual usage at the net invoiced cost, subject to adjustment as provided in Section 1(e) and in accordance with the other payment terms in Section 2(a), provided, however, that (A) FMC shall have first agreed in writing that Cedar will purchase such Raw Material(s) at a defined cost, and (B) the Raw Material(s) conform to the applicable Raw Material Specifications

(d) Tolling Ratio The quantity of Raw Materials delivered by FMC hereunder shall be based initially on the following target tolling ratios ("Tolling Ratios"):

<u>Raw Material</u>	<u>Raw Material Lbs./ Lb. Product (100% basis)</u>
Step 3 Product	1.12
Acetic Acid	0.75
Aluminum Sulfate, 50% alum solution	0.35 (100% basis)
Methanol	5.00
Chlorine	0.75
Oleum (20% SO <sub>3</sub> )	5.38
Caustic Soda, 50% solution	1.00 (100% basis)
Nitrating Acid (90% Nitric/10% Sulfuric)	0.35
Sodium Carbonate	0.18
Recovered Toluene	4.00
Sulfuric Acid, 92%	0.24
Nitrogen	15 standard cubic feet/lb.

The target Tolling Ratios identified above are those FMC anticipates. The target Tolling Ratios shall be revised based on the actual results of the Trial Campaign. The revised Tolling Ratios shall be set forth in an Amendment to this Agreement, and shall be applicable to production following the Trial Campaign until further revised in accordance with the terms hereof.

The Tolling Ratios and the Waste Ratios (as defined in Section 1(i)(ii) below) shall be revised after the end of each of the Trial Campaign and the First Campaign (such revision event hereinafter referred to as "Ratio Revision Event"), to reflect actual production experience for the immediately preceding period, i.e., from the Ratio Revision Event back to the immediately preceding Ratio Revision Event (or back to the Effective Date in the case of the Trial Campaign). Such production period is hereinafter referred to as "Production Period."

All revised Tolling Ratios and Waste Ratios shall be as mutually agreed upon by the parties and set forth in a writing signed by both. Once revised hereunder, the Tolling Ratios and Waste Ratios shall apply to all subsequent production under this Agreement unless and until revised hereunder.

(e) Additional Compensation/Reimbursement - Tolling and Waste Ratios.

In connection with each Ratio Revision Event, Cedar shall conduct an inventory of Raw Materials received from FMC or supplied by Cedar and shall determine the actual average pound(s) of Raw Materials used and of each type of Waste (as identified in Section 1(i)(ii) below) generated for each pound of Product produced during the just ended Production Period. Cedar shall account in writing to FMC for the usage of Raw Materials and the generation of Waste during such Production Period.

(i) After the first Ratio Revision Event, if Cedar achieves a tolling ratio for one or more of the Raw Materials lower than the Tolling Ratio for that Raw Material in effect during that Production Period, FMC shall pay Cedar additional compensation in an amount equal to fifty (50%) of FMC's and/or Cedar's aggregate invoiced cost of all Raw Materials saved by virtue of such lower ratio. If, however, Cedar fails to convert one or more of the Raw Materials (whether delivered by FMC or supplied by Cedar) into the quantities of Product specified hereinabove at an efficiency which is at least equal to the Tolling Ratios in effect during such Production Period, Cedar shall reimburse or credit FMC (as the case may be) for the aggregate invoiced cost of such additional quantities of Raw Materials as Cedar may use in meeting its obligations hereunder.

(ii) After the first Ratio Revision Event, if Cedar has achieved a waste ratio for any of the Wastes lower than the Waste Ratio for that Waste in effect during that Production Period, FMC shall pay Cedar additional compensation in an amount equal to fifty percent (50%) of Cedar's invoiced per pound disposal fees for that Waste saved by virtue of such lower ratio. Cedar shall not be reimbursed, however, should Cedar's production of Product result in more actual waste per pound of such Product than is provided under the Waste Ratio in effect during that Production Period.

(iii) The parties may net out their respective obligations to and from the other party under this Section 1(e)(i) and (ii) in rendering payment or credit after a Ratio Revision Event

(f) FMC Warranty, Limitation, Non-Conforming Raw Material.

(i) FMC warrants that it shall have good title to the Raw Materials delivered by it hereunder to Cedar and that such Raw Materials shall conform to the applicable Raw Material Specifications. FMC makes no other warranty, express or implied, oral or written respecting the Raw Materials. Cedar promptly shall notify FMC of any Raw Material it believes to be non-conforming and shall hold such Raw Material for not less than thirty (30) days after such notification has been given, so that FMC may inspect, verify and/or provide instructions for disposition (at FMC's expense) which instructions shall not be unreasonably withheld or delayed. If FMC fails to provide such instructions within such thirty-day period, Cedar may dispose of the non-conforming materials at FMC's expense following at least ten (10) days prior notice to FMC, which disposal shall be deemed to be approved by FMC (subject to Cedar's indemnification obligations in Section 7 below for any unauthorized disposal).

(ii) FMC represents and warrants that to the best of its knowledge production of Product in accordance with the Process and Cedar's use of technical information and materials furnished to Cedar hereunder by FMC will not infringe on any rights of any third party, whether patent or otherwise.

(iii) FMC represents and warrants that it has previously disclosed to Cedar in the Process and in the Sulfentrazone Process Technology Package, Steps 4 and 5 dated August 1996 (which shall be treated as FMC Proprietary Information pursuant to Section 9(b) below), all material information relating to health, safety and environmental aspects of manufacturing Product. Such information is true, complete and accurate to the best of its knowledge. FMC will promptly notify Cedar of any additional relevant information of the same nature which becomes known to FMC.

(iv) FMC acknowledges that it is aware of and understands hazards or risks in handling or using Product and the compliance requirements of the OSHA Hazard Communication Rule. FMC agrees to take the steps necessary under the applicable law to inform, warn and familiarize its employees, agents, customers and contractors who may reasonably be expected to handle Product of the hazards pertaining to and proper procedures for safe use thereof, and of the containers and equipment in which Product may be handled, shipped or stored. FMC represents and warrants that it will label as appropriate any materials which it makes or resells that include Product.

(g) Title. Title to all Raw Materials and Containers/Labels delivered by FMC hereunder to Cedar, and to all Product (including intermediate products and other work-in-progress produced therefrom) and to all Recovered DMF Solvent, shall at all times be and remain vested in FMC. Cedar shall keep such Raw Materials, Containers/Labels, Product and Recovered DMF Solvent physically segregated and clearly identifiable that they are not the property of Cedar but belong to another entity (FMC). At no cost to FMC, Cedar shall execute documents and take such other actions as FMC may from time to time reasonably request to evidence FMC's ownership of such Raw Materials and Product. Notwithstanding the preceding provisions of this Section 1(g), Cedar will bear risk of loss of (i) any and all Raw Materials and Containers/Labels from the time they are delivered to Cedar's plant until the production process is complete, and (ii) all Product and Recovered DMF Solvent from the time the production process is completed until the finished Product or Recovered DMF Solvent is placed with a carrier designated under Section (b)(i) above at the Facility (at which time the risk of loss of such Product or Recovered DMF Solvent shall pass to FMC). FMC acknowledges that Cedar's storage capacity for Product and Recovered DMF Solvent is limited, and agrees to arrange transportation of Product and Recovered DMF Solvent from the Facility in a manner that will not disrupt Production Campaigns hereunder.

(h) Other Materials. Except for Raw Materials and Containers/Labels as provided in Section 1(c)(i), Cedar will provide at its sole cost and expense all other materials required for the production of Product.

(i) Waste Disposal.

(i) Cedar shall retain a properly qualified and licensed third party disposer (approved in advance in writing by FMC, which approval FMC may withhold in its sole discretion) to dispose in a safe and lawful manner all wastes and residues resulting from production of Product and Recovered DMF Solvent hereunder. FMC shall have thirty days after it has been notified in writing of Cedar's selection of a third party disposer and of such disposer's disposal fees to indicate whether FMC approves of the selection and the fees. FMC shall be deemed to have approved of such selection and fees if it fails to provide Cedar with a written response within such thirty day period. In any event, Cedar and FMC shall agree on selection of the initial waste disposers and disposal fees prior to start up of the Trial Campaign. Subject to Section 1(e)(ii) above and to the adjustment set forth in Section 1(i)(ii) below, FMC shall reimburse Cedar for any waste disposal fees charged by any approved (or deemed approved) third party disposer to handle such disposal.

(ii) The target Waste Ratios hereunder for Product shall be as follows:

<u>Type of Waste</u>	<u>Gallons of Waste per lb. of Product</u>
Waste Water	1.00
Organic Waste	1.20
Spent Acid Solution	0.60

The target Waste Ratios identified above are those which FMC anticipates. The target Waste Ratios shall be revised based on the actual results of the Trial Campaign and shall be adjusted thereafter in a manner and at the time set forth in Section 1(d) above.

(iii) Cedar shall provide FMC promptly upon request with copies of all waste related shipping and treatment/disposal documents.

(iv) FMC at any time may terminate this Agreement, in accordance with Section 15(a) upon written notice to Cedar, if Cedar violates the provisions of this Section 1(i).

(j) Production Activity

(i) Cedar acknowledges that diligence must be exercised in its manufacturing practices to avoid potential chemical contamination of products. Accordingly, Cedar represents and warrants that it will exercise such diligence to ensure that all Raw Materials, Product, Intermediate Product (as more particularly defined and meeting Intermediate Product Specifications set forth in Appendix E), Recovered DMF Solvent and Containers/Labels are stored and handled, and that all equipment used to produce or store Product and Recovered DMF Solvent is thoroughly cleaned before and after any Production Campaign, so as to avoid contaminating any Products or Recovered DMF Solvent Cedar may produce or store in such equipment or otherwise handle and so as to avoid contaminating any products Cedar may make.

for third parties in such equipment thereafter. Without limiting any of the foregoing, Cedar and FMC will mutually develop a process and methodology to validate the effectiveness of Cedar's preparation and clean out procedures.

(ii) Cedar shall promptly notify FMC should Cedar at any time discontinue the use of specific manufacturing equipment or change any manufacturing procedure relative to production of Product or Recovered DMF Solvent, or produce in Unit No. 1 at the Facility any other pesticide, active ingredient or other chemical substance or mixture which may be incompatible with Product. Cedar shall incorporate the preceding provisions of this subclause into its written procedures for reviewing and implementing process changes.

## 2. Price and Terms of Payment.

(a) Toll Fee As complete consideration for Cedar's services and other obligations in producing Product hereunder, FMC shall pay Cedar the fees and reimbursements identified in Sections 1(c) (ii), 1(e), 1(i), 2(b) and 2(d) and shall pay Cedar an operating per diem processing fee ("Toll Fee") of \$22,000 per day during the entire period of the Trial Campaign beginning with the initial date of start up of Unit #1 for production of Product hereunder and ending on the effective date of the initial Ratio Revision Event hereunder, it being understood that Cedar's entire Unit # 1 will be dedicated to and utilized in producing Product throughout the Trial Campaign. The per diem Toll Fee shall be reduced to \$20,000 during the remainder of the First Campaign. FMC and Cedar will renegotiate the Toll Fee in good faith after completion of the First Campaign, provided that the Toll Fee for Product produced during the Second Campaign will either be based on a per diem rate of \$18,000 per day or on an agreed amount per pound (100% active ingredient) of Product subject to Cedar's ability to produce Product at a sustained rate of production acceptable to the parties from Raw Materials supplied by FMC.

(b) Prep/Clean-out Fees. FMC shall pay Cedar a plant preparation and cleanout fee totaling \$200,000 for the First Campaign (which shall be due and payable thirty (30) days from date of start up of the Trial Campaign) and \$140,000 for the Second Campaign (due and payable thirty (30) days following the initiation of such Production Campaign), or such lesser amount as the parties hereto shall agree. The start up of a Production Campaign is considered to have occurred for purposes of this Agreement when the Sulfentrazone Step 3 intermediate Raw Material provided by FMC is charged to Unit # 1 for that particular Production Campaign.

(c) Payment Terms. Cedar's per diem Toll Fees and all reimbursable costs hereunder shall be invoiced at the end of each calendar month covering production of Product during such calendar month. In the event FMC and Cedar adopt a per pound Toll Fee, Cedar shall invoice FMC for each shipment of Product. All invoices hereunder shall be payable by FMC within thirty (30) days of date of invoice. All invoices are subject to reasonable verification by FMC and, for Product produced after the Trial Campaign, payment is dependent upon such Product meeting the Specifications upon delivery pursuant to Section 1(b)(i) above.



(d) Capital Improvements.

(i) Scope. Cedar will modify Unit #1, and install additional equipment, including equipment loaned by FMC to Cedar, all in accordance with and as identified in Exhibit 3 to this Agreement (collectively "Capital Improvements") to enable Cedar to produce Product. FMC will provide Product processing guidance, may provide process safety reviews and recommendations, and will review and approve any Capital Improvement designs and costs prior to their implementation, but such guidance, reviews, recommendations, and approvals shall not relieve Cedar of responsibility for the mechanical design of the Capital Improvements (taking into account the process objectives and safe operation) and for installing and completing the Capital Improvements in a workmanlike manner, in accordance with the specifications set forth in Exhibit 3 attached hereto, and free of any defect in materials or workmanship.

(ii) Reimbursement. FMC will reimburse Cedar for its actual out-of-pocket costs for implementing the Capital Improvements identified in Exhibit 3, including those costs incurred by Cedar prior to the Effective Date hereof pursuant to a Letter of Intent dated June 6, 1997 entered into between FMC and Cedar, as amended, a true and correct copy of which is attached hereto as Appendix F, up to a total of \$5,800,000 ("Capital Costs"). Any changes in the Capital Improvements requested by FMC and approved by Cedar shall be implemented by Cedar at FMC's cost in addition to the Capital Costs referred to hereinabove. Cedar will provide FMC with copies of contracts, purchase orders, invoices, payments and other documents and access to any of its and its contractors' employees and consultants as FMC may reasonably request to verify amounts to be reimbursed hereunder. Cedar shall be reimbursed for the Capital Costs referred to herein as follows: The total reimbursable Capital Costs hereunder shall be divided by 800,000 pounds of Product and the resulting fee per pound (the "Capital Surcharge Fee") shall be invoiced by Cedar and paid by FMC with respect to the initial 800,000 pounds of Product produced under this Agreement, including all Product produced during the Trial Campaign, whether or not such Product meets the Specifications attached hereto, provided, however, the total reimbursable Capital Costs incurred by Cedar shall in any event be reimbursed in full by FMC no later than twelve months following start up of the Trial Campaign. For example, if the Capital Costs total \$5,600,000 the Capital Surcharge Fee will be \$7.00 per pound (100% Active Ingredient Basis) for all Product produced hereunder and if Cedar shall have produced a total of 700,000 pounds of Product within twelve (12) months following start up of the Trial Campaign, FMC shall reimburse the balance of the said reimbursable Capital Costs, totaling \$700,000, promptly following receipt of Cedar's invoice therefor

(iii) Return of Equipment Upon termination of this Agreement, FMC shall be given a reasonable opportunity to remove any or all of the items of equipment identified in Exhibit 4, including any equipment loaned to Cedar by FMC, provided that FMC shall have reimbursed Cedar the total Capital Costs referred to herein and also provided that in the event FMC exercises its rights of removal hereunder, it shall restore Unit # 1 to its condition prior to the removal of such equipment (but FMC shall not be required to replace any equipment so removed).

(e) **Project Timing.** Cedar will use its best efforts to install and complete the Capital Improvements referred to herein in a manner that will permit the mechanical completion of the Capital Improvements and to obtain all required governmental permits and consents so that Unit #1 is ready for start up of the Trial Campaign ("Completion") by no later than January 30, 1998. In addition, Cedar must successfully complete and pass water/solvent testing of Unit #1 and other pre-start up testing set forth in Exhibit 5 before Completion is considered achieved. Cedar is aiming to achieve mechanical completion of Unit #1 by January 15, and to complete pre-start up testing and any needed corrections within two weeks thereafter. In the event that the Completion is delayed beyond January 30, 1998 as a result of the fault or nonperformance of Cedar or its contractors, Cedar will compensate FMC for such delay by reducing FMC's financial obligation to reimburse Cedar for its Capital Costs pursuant to Section 2(d) above, as follows.

<u>Period of Delay</u>	<u>Decrease in FMC Compensation</u>
One week (seven days)	1% of Capital Costs
Two weeks	2% of Capital Costs
Three Weeks	3% of Capital Costs
Four Weeks and Longer	4% of Capital Costs and Additional 1% per week and thereafter

In the event Cedar achieves Completion prior to January 30, 1998, Cedar shall be entitled to an incentive fee (the "Incentive Fee") calculated as follows:

If Completion is achieved by January 23, 1998, the Incentive Fee shall be equal to 2% of the Capital Costs. An additional 2% of Capital Costs shall be added to the Incentive Fee for each earlier week in which said date of the Completion occurs prior to January 23, 1998, e.g., if Completion is achieved by January 16, 1998, the Incentive Fee shall be equal to 4% of the Capital Costs. Any such Incentive Fee shall be due and payable by FMC thirty (30) days from date of start up of the Trial Campaign.

(f) **Liquidated Damages** In the event this Agreement is terminated pursuant to its terms at any time prior to the date on which Cedar shall have produced the Target Quantity (as defined below) of Product for FMC hereunder (excluding, however, termination by FMC pursuant to Section 11(c) arising out of any event of force majeure (but only if Cedar is the affected party) or pursuant to Section 15(a) below, as to which no liquidated damages shall apply), FMC shall pay Cedar as its agreed liquidated damages and exclusive remedy, in addition to reimbursement of the Capital Costs and payment of all other fees and other reimbursements then due Cedar in accordance with the terms hereof for Cedar's performance up to such termination date, the following "Early Termination Fee": the sum of \$15,000 for each of the Reserve Days remaining as of the effective date of termination, decreased for each such Reserve Day that Cedar is able to use Unit #1 for production for a third party or for its own account (and Cedar will use its best efforts to so mitigate FMC's liquidated damages by attempting to find alternative uses for Unit #1). For purposes of this Section 2(f), "Target Quantity" is defined as 800,000 pounds, provided that should this Agreement be terminated effective after September 30, 1998, then (i) the 800,000 pound Target Quantity shall be reduced by the product of 25,000

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pounds multiplied times the number of weeks, if any, that the commencement of the Second Campaign is delayed beyond October 1, 1998 (e.g., if the Second Campaign begins on October 15, 1998, then the Target Quantity shall be 800,000 - (25,000 x 2), or 750,000 pounds), and (ii) the number of Reserve Days used to calculate the Early Termination Fee shall be reduced for each day after October 1, 1998, that the commencement of the Second Campaign is delayed.

3 Term

This Agreement shall commence as of the Effective Date and shall continue through June 30, 1999, unless sooner terminated as hereinafter provided, or unless extended by mutual consent of the parties.

4 Quality Control, Reports and Inspections

(a) Batch Testing. At its own expense, Cedar shall test (i) each batch of Intermediate Product at each process step for conformance with applicable specifications set forth in Appendix E, and (ii) each batch of Product and Recovered DMF Solvent produced hereunder for conformance to and in accordance with the Specifications. Cedar shall promptly submit to FMC a Certificate of Analysis for each shipment of Product and Recovered DMF Solvent.

Each shipment of Product and Recovered DMF Solvent and each invoice to FMC will be accompanied by the results of such analyses. Cedar shall retain a sample of every batch of Product and Recovered DMF Solvent produced by it hereunder for at least one (1) year (or until the termination or expiration of this Agreement, if shorter), during which period it will remain the property of FMC. At the end of the retention period, Cedar shall either dispose of the samples as waste (in accordance with Section 1(i)(i) above) at FMC's expense, or return them to FMC if so requested at FMC's expense.

(b) Record Maintenance; Reports Cedar will maintain complete and accurate records of Raw Materials and Containers/Labels received, Intermediate Product, Recovered DMF Solvent and Product produced, quality control, sampling and testing, storage of Raw Materials, Intermediate Product, Recovered DMF Solvent and Product, and other matters pertaining to this Agreement (collectively, the "Records"). For any month during which Cedar produces any Intermediate Product, Recovered DMF Solvent or Product, Cedar shall provide FMC with verbal production status reports throughout the month upon FMC's request and with a monthly written production report approved by Cedar's accounting department on the tenth business day of the next calendar month, which shall report pounds of Raw Materials received, used, and held in inventory by Cedar and pounds of Intermediate Product, Recovered DMF Solvent and Product produced and shipped or held in inventory by Cedar during the month. In addition, Cedar shall provide FMC with production status reports throughout the production month, on an agreed upon basis, and upon request provide FMC with production records for each individual batch of Intermediate Product, Recovered DMF Solvent and Product, indicating materials used, pounds of Product and Recovered DMF Solvent produced, analytical data for process and product streams, and major operating conditions. Cedar represents and warrants to FMC and covenants that all

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records to be maintained and reports to be furnished under this Agreement shall be complete and accurate in all material respects.

(c) Inspection Access. At all reasonable times during the term hereof, FMC shall have the right to conduct on-site inspections of Cedar's Facility, to audit and copy Cedar's Records pertaining in any way hereto, and to inventory all Raw Materials, Containers/Labels, Intermediate Product, Recovered DMF Solvent and Product in Cedar's possession. Cedar shall permit FMC reasonable access to Cedar's plant for such purposes.

(d) Non-conforming Batches If any test performed pursuant to Section 4(a) indicates a failure to conform to the applicable Intermediate Product specifications, Recovered DMF Solvent Specifications or Product Specifications, as the case may be, Cedar promptly shall advise FMC and shall not deliver Product from such batch without the express written consent of FMC. Intermediate Product and Product which is defective (except in either case if not due to Cedar's error or fault or except if produced during the Trial Campaign) shall either (i) be reworked or blended with other Intermediate Product or Product by Cedar at its sole cost and expense, if possible and feasible and if FMC explicitly so requests, or (ii) if such Intermediate Product or Product is not so reworked or blended it shall be disposed of as waste at Cedar's sole cost and expense, in accordance with Section 1(i), and Cedar shall reimburse FMC for the value of the Raw Materials used in the Product destroyed, including any transportation and other related charges paid thereon by FMC. In either case, Cedar will first consult with FMC before taking action and will comply with all applicable government laws, rules and regulations. Any off-specification Product, Intermediate Product or Recovered DMF Solvent produced during the Trial Campaign shall be reworked or disposed of pursuant to FMC's instructions and at its cost.

5. Cedar's Plant

(a) Representations, Warranties and Covenants. Cedar represents, warrants and covenants that:

(i) Cedar has obtained or will obtain in a timely fashion all federal, state and local permits, licenses, zoning variances, approvals, certificates and other authorizations necessary for the operation of the Facility where the Product will be produced and for Cedar to perform its obligations under this Agreement;

(ii) The Facility where the Product will be produced are and at all times during the term hereof shall be, and all wastes arising out of production hereunder will be handled, stored, transported, treated, and disposed of, in full compliance with all applicable local, state and federal laws, rules, regulations, ordinances, orders, permits, licenses, zoning variances, approvals, certificates and other authorizations (including, without limitation, those relating to the environment and employee health or safety), and all wastes arising out of production hereunder shall be handled, stored, transported, treated and disposed of in full compliance with all such applicable laws, regulations and requirements,

(iii) Cedar understands that the Product, the raw materials and Intermediate Product are chemical substances subject to the Toxic Substances Control Act, as amended, and the rules, regulations and orders promulgated thereunder (collectively, "TSCA"), that FMC and U.S. Environmental Protection Agency ("EPA") have signed a Consent Order and Agreement pertaining to the manufacture of Product (a copy of which has been provided to Cedar), and that Cedar is required to sign a Consent Order and Agreement with EPA which will pertain to Cedar's production of Product under this Agreement in the form attached hereto as Exhibit 6. Cedar agrees to sign such Consent Order and Agreement and to abide by all of the terms and conditions therein applicable to it and its production of Product;

(iv) Cedar shall keep such records and submit such reports as may be required under this Agreement and/or applicable law, including without limitation TSCA and the Consent Order and Agreement, and shall provide to FMC copies of all such records and reports promptly upon request; and

(v) Cedar has received and is familiar with FMC technical process data for the Product and its manufacture and applicable material safety data sheets; and Cedar is familiar with the requirements of applicable safety laws and codes governing specialty chemical manufacture, will follow good manufacturing practices in production, packaging and storing of the Product as generally recognized in the specialty chemical industry and will comply with the CMA Responsible Care® codes, and at all times will comply with all applicable local, state and federal laws, rules and regulations governing the production of Product.

(b) Non-compliance Notice. Cedar shall notify FMC in writing within five (5) business days of receipt of any notice Cedar receives from any authority that it is not in compliance with any applicable environmental, health or safety law, rule, regulation, or other requirement in any way relating to or involving the Product or Intermediate Products or to Cedar's manufacture thereof, including, without limitation, the handling, storage, transportation, treatment and disposal of wastes as required by Sections 1(i) and 5(a) hereof.

(c) Governmental Inspection. Cedar shall promptly notify FMC (in advance, if possible) of any inspection by a representative of the Environmental Protection Agency, the Department of Labor, or any other federal agency or state or local regulatory agency in any way involving or related to the Product, Intermediate Product or Raw Materials, or the Intermediate Products' and/or Products' manufacture, and FMC may, if it so chooses, be present at any such inspection. If FMC cannot or fails to attend any such inspection, representatives of Cedar shall provide FMC with all relevant details relating to the inspection.

## 6. Cedar's Product Warranty

(a) Warranty. Cedar warrants that all Product and Recovered DMF Solvent delivered pursuant to this Agreement following the Trial Campaign shall in all respects conform to the applicable Specifications as stated in, and determined in accordance with, Section 1(b) hereof at the time of delivery to the carrier, and shall be delivered free from any valid security interest, lien or encumbrance (created by Cedar's actions or failure to act) in favor of any third party.

(b) Remedies. FMC's remedies for breach of the warranty in this Section shall be limited to: (i) (A) the reimbursement of the value of the Raw Materials and Containers/Labels used in the defective Product, including any transportation and other related charges paid thereon by FMC; (B) the reimbursement of any transportation and other related charges paid by FMC for the defective Product and (C) at FMC's option, replacement of the defective Product or reimbursement of the price paid by FMC for its production, it being understood that if FMC requires replacement hereunder it will provide sufficient Raw Materials and Containers/Labels in connection therewith, and (ii) to the extent FMC is unable to produce and deliver its sulfentrazone commitments to third party(ies) or FMC incurs incremental production costs, in either case attributable to Cedar's delivery of nonconforming Product, then any ensuing consequential damages up to a maximum amount per pound of nonconforming Product of \$37.00/lb. in 1998 and \$31.00/lb. in 1999.

7. Indemnities.

(a) General. Each party shall indemnify, defend and hold harmless the other party, its officers, directors, employees, representatives and agents, from and against any and all liabilities, damages, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, costs and expenses (including reasonable attorneys' fees), suits, investigations, proceedings, audits and causes of action brought by third persons (including employees of the indemnified party), resulting from, related to, or arising out of (i) the indemnifying party's (or any of indemnifying party's officer's employee's, agent's or representative's) negligence or other tortious acts, (ii) any misrepresentation or breach of warranty or nonfulfillment (whether by act or omission to act) of any of the covenants or agreements of the indemnifying party in this Agreement, or (iii) any misrepresentation in or omission from any certificate or document furnished or to be furnished to the indemnified party hereunder.

(b) Specific by Cedar. Subject to General Indemnities in Section 7(a) above, Cedar shall indemnify, defend and hold harmless FMC, its officers, directors, employees, representatives and agents, from and against any and all liabilities, damages, response costs, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, cost and expenses (including reasonable attorneys' fees), suits, investigations, proceedings, audits, and causes of action brought by third persons arising under any Environmental Laws (as hereinafter defined) in connection with or in any way relating to: (i) Cedar's plant where Product is produced, or (ii) the Cedar's generation, storage, treatment or disposal of any wastes, or reusable or recyclable material, in connection with the manufacture of Product pursuant to this Agreement, unless Cedar sent such waste or material to a licensed disposal facility approved or deemed approved by FMC under Section 1(i)(i) or Section 1(f)(i).

"Environmental Laws" means any and all federal, state, and local statutes, laws (including case law), regulations, ordinances, rules, judgments, orders, decrees, codes, injunctions, permits, or any other federal, state or local restrictions relating to human health, the environment or to emissions, discharges or releases of pollutants, contaminants, Hazardous Substances (as defined in 42 USC §9601 (14)) or wastes into the environment including, without

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limitation, ambient air, surface water, ground water, or land, or otherwise relating to the manufacture, processing, distributions, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, Hazardous Substances or wastes or the investigation, study, clean-up or other remediation thereof.

(c) Specific by FMC. Subject to the General Indemnities of Section 7(a) above, FMC shall defend, indemnify, and hold Cedar, its officers, directors, employees, representatives and agents harmless from any liabilities, damages, obligations, losses, penalties, claims, judgments, demands, assessments, encumbrances, costs and expenses (including reasonable attorney's fees), suits, investigations, proceedings, audits and causes of action resulting from, related to, or arising out of any claim, whether rightful or otherwise, that any information furnished by FMC under this Agreement constitutes an infringement of any applicable trade secret, patent, copyright, or other intellectual property right, and any claim arising out of transportation, storage and use of Product after leaving Cedar's custody and control.

(d) Conditions of Indemnification. The foregoing indemnification, defense and hold harmless obligations are conditioned upon (i) the indemnified party furnishing to the indemnifying party copies of all notices, complaints and other pleadings and correspondence relating to any of the above bases on which indemnification is sought, within thirty (30) days of its receipt thereof, and (ii) the indemnified party providing all assistance and cooperation reasonably requested by the indemnifying party in connection therewith.

**8. Insurance**

(a) Casualty. During the term of this Agreement, Cedar shall carry worker's compensation (in statutory amounts), employers' and comprehensive general casualty and liability (including product liability) and contractual indemnity liability insurance with minimum limits of \$5,000,000 per person and \$15,000,000 per occurrence (and \$15,000,000 aggregate) with an insurer or insurers reasonably acceptable to FMC, and naming FMC as an additional insured thereunder. Before commencing manufacture hereunder, Cedar will provide certificates evidencing such insurance with notations to the effect that FMC will be notified within thirty (30) days' of any notice of cancellation, notice of intent to cancel or any material change in the terms and conditions of the policy.

(b) Property. Cedar shall maintain in effect such insurance policy or policies as FMC may reasonably request to protect FMC's interest in Raw Materials, materials and Product on Cedar's premises, in amounts not less than \$3,000,000 per occurrence (and \$3,000,000 aggregate).

**9. Patent, Confidential Information**

(a) Patent. FMC is holder of U.S. patents covering certain process technology related to the manufacture of Product. Cedar is expressly authorized to manufacture Product under such patents for FMC at FMC's request, pursuant to this Agreement. Cedar is not authorized by this Agreement to, and shall not, produce any Product under such patents for its

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own account or for any third party, and nothing in this Agreement shall be construed so as to imply any authorization or license to permit the same.

**(b) Confidentiality Undertaking**

(i) FMC may choose from time to time to disclose to Cedar information (whether oral or written) that is pertinent to the Product or the manufacture thereof, and which FMC regards as proprietary and/or confidential ("FMC Information"), irrespective of whether Cedar has requested such disclosure. If orally disclosed, FMC may summarize the disclosure in writing and provide Cedar with a copy thereof which shall constitute prima facie evidence of the fact, scope and nature of such disclosure. Any information disclosed by FMC to Cedar prior to the date hereof and pertaining to the Product or the manufacture thereof shall be deemed to be included in FMC Information for purposes hereof.

(ii) Cedar agrees to maintain the FMC Information in secrecy and confidence, not to publish or otherwise disclose it to others, and to refrain from using it other than in the performance of its obligations hereunder, without the prior written consent of FMC. Any documents containing FMC proprietary or confidential information, including any working papers or similar documents developed by Cedar in connection with the manufacture, processing or handling of the Product, shall be considered FMC Information, and Cedar shall execute and deliver such documents or take such other action as FMC may request for purposes of establishing or defending its property rights created hereby. Upon termination of this Agreement, and as requested by FMC, Cedar shall deliver to FMC all FMC Information, retaining no copies, except that Cedar's counsel may retain one archival copy of such FMC Information solely for monitoring and establishing its compliance with its confidentiality obligations under this Agreement

(c) **Applicability** Cedar's covenants in this Section 9 shall apply equally to Cedar and its officers and employees. Moreover, Cedar shall limit dissemination of FMC Information only to those of its officers and employees who have a need to know such information in order to enable it to perform its obligations under this Agreement. Such officers and employees shall be legally bound by Cedar to obligations of non-disclosure and non-use of the FMC Information that are no less stringent than those set forth in this Agreement. Cedar shall be responsible for any breach of this Section 9(c) by anyone covered hereunder.

(d) **Limitations**. This Section 9 shall not apply to any information which: (i) is published at the time of disclosure to Cedar, or which thereafter becomes published other than as a result of breach of this Agreement; (ii) is acquired by Cedar, without restrictions of confidentiality or use, from a third person who did not derive the same directly or indirectly from or through FMC and who has a bona fide right to disclose such information; or (iii) can be shown by Cedar's written records to have been known to Cedar before its disclosure by FMC.

(e) **Confidential Relationship**. The provisions of this Section 9 to the contrary notwithstanding, Cedar will not in any event, without express written permission from FMC, disclose to any third person: (i) the subject matter of this Agreement; (ii) any work Cedar may



carry out for FMC in connection with this Agreement; or (iii) the fact that Product is an intermediate for sulfentrazone or of FMC's interest in having another manufacturer manufacture Product for FMC -- except as to any disclosure required by law, provided that, to the extent possible, Cedar has prior thereto given FMC notice of the intended disclosure sufficient to enable FMC to seek a protective order (or other appropriate remedy), if FMC so desires.

(f) Duration of Confidentiality. Cedar's obligations of nondisclosure and non-use set forth in this Agreement shall survive for a period of fifteen (15) years following the expiration or termination of this Agreement.

(g) Remedy. Cedar specifically agrees that money damages would not be a sufficient remedy for any breach by it of this Section 9 and that FMC shall be entitled to specific performance as a remedy for any such breach. Specific performance shall not be deemed to be the exclusive remedy for any breach by Cedar hereunder, but shall be in addition to all other remedies provided by law or equity.

10. Improvements and Modifications. In the event that Cedar develops, invents or discovers any improvement, modification or change (whether or not patentable) to the Product or any aspect of the Product production process (hereinafter referred to as an "Improvement"), Cedar shall grant to FMC a perpetual (except that in the case of a patent such license shall be for the life of such patent) royalty-free, non-exclusive right and license throughout the world to all aspects of the Improvement, without any further payment by or cost or charge to FMC. Cedar will not use any Improvement in fulfilling a purchase order under this Agreement without FMC's prior written consent.

#### 11. Force Majeure

(a) Force Majeure Events. Neither party shall be liable or responsible for failure to perform, or for delay in performing, any obligation hereunder by it (the "affected party") if such delay or failure is caused by Act of God, fire, explosion, accident, interruption of or delay in transportation or shortage or failure of supply of materials, equipment (and any required back-up equipment) breakdowns, labor strife, or governmental action or inaction or compliance with any order or regulation of any governmental authority (including, without limitation, any reduction in quantity of Product FMC needs due to any cancellation, suspension, modification or revocation of any sulfentrazone pesticide registration(s) or tolerance(s)) (or particular use(s) authorized thereby), or any other cause beyond the reasonable control of the affected party (individually and collectively, "Force Majeure Event"), provided that, in such event, both parties shall make their best reasonable good faith efforts to mitigate or overcome the affected party's inability to perform. Registration Actions are separately addressed in Section 1(a)(iv) above and are excluded from the definition of Force Majeure Event.

(b) Consequences of Force Majeure Event. The affected party shall promptly notify the other of the occurrence of any Force Majeure Event or circumstances which affects such party's ability to perform hereunder and of the expected duration of such event or circumstances. Any quantities of Product which cannot be produced during the continuance or

expected continuance of the Force Majeure Event shall be reduced as an obligation under this Agreement. If Cedar is the affected party, (i) it shall at its own expense return to FMC any unused Raw Materials previously received by Cedar for production of such quantities, and shall reimburse FMC for the cost of any Raw Materials delivered to Cedar under this Agreement and destroyed or rendered unusable due to any Force Majeure Event, and (ii) FMC may enter into agreements with third parties to manufacture Product and/or Intermediate Product as may be necessary to supply FMC's requirements during the expected continuance of such Force Majeure Event

(c) Termination. If occurrence of any Force Majeure Event prevents performance by either party for three (3) consecutive months, the other party may terminate this Agreement at any time after the end of such third month, on at least thirty (30) days' prior written notice to the other without further liability to or from the affected party, except that such termination shall not affect FMC's reimbursement obligations under Section 2(d); provided, however, if Cedar is the affected party and FMC terminates hereunder, then such obligations shall be limited to the after-tax consequences (if any) of such Force Majeure Event (i.e., net of any tax savings through deductions or credits Cedar may claim) and shall be reduced dollar for dollar for any insurance proceeds, monetary settlement(s) or legal judgment(s) (less out-of-pocket costs and expenses incurred in obtaining such proceeds, settlement(s) or judgment(s)) Cedar may collect in connection with occurrence of the Force Majeure Event.

(d) Shortages. In the event of a shortage or anticipated shortage of labor, raw materials, utilities, fuel or energy for use in the production of Product covered by this Agreement and/or delay in shipment or delivery occasioned by any of the causes mentioned in Section 11(a), the parties will use their respective best efforts to allocate equitably the available labor, raw materials, utilities, fuel and energy to use in the Product (in the case of Cedar) or Raw Materials (in the case of FMC) covered by this Agreement. Cedar shall not be obligated to make up any deficiencies in Product hereunder due to any such cause except by written agreement of the parties hereto.

12. Assignment

Neither party shall assign this Agreement or any obligation hereunder without the prior written consent of the other party and any purported assignment without such consent shall be void.

13. Patent Infringement

In the event of a claim of patent infringement against Cedar or FMC arising out of such party's performance of its obligations under this Agreement, such party shall have the right, at its sole option, to suspend the performance of the alleged infringing activity, without liability or obligation to the other party, until such claim is resolved to its satisfaction. If any such suspension continues for one hundred eighty (180) consecutive days or more, the other party shall have the right to terminate this Agreement at any time after the end of the 180th day, upon at least thirty

(30) days' prior written notice, provided that any such termination by FMC shall not effect FMC's obligations under Sections 2(d) and (f) of this Agreement.

14. FMC's Marks and Names

Cedar shall not register or use any of FMC's marks, names, corporate slogans, logos or packaging designs (or any similar marks, names, corporate slogans, logos or packaging designs) except as specifically approved in writing by FMC in advance. Packaging and labeling the Product in and with the Containers/Labels shall not be considered use for purposes of this Section 14.

15. Termination

In addition to the termination rights provided elsewhere in this Agreement:

(a) Breach. Either party may terminate this Agreement by prior written notice to the other party if the other party shall default in the performance of any material obligation or be in breach of any material provision hereunder and shall fail to remedy such default or breach within thirty (30) days after receipt of such written notice thereof and, other than for the Toll Fee, Capital Surcharge Fee and any reimbursements for Product which has been produced from Step 3 Raw Materials charged to Unit # 1 prior to the effective date of termination, FMC shall have no further obligation to Cedar under Section 2(d) above if FMC is the terminating party. For purposes of FMC's termination rights under this Section 15(a), notwithstanding Cedar's covenants in Section 5(a)(ii) above, it is not intended that FMC may terminate this Agreement due solely to unintended, occasional operating excursions or process upsets which cause Cedar to temporarily fall out of compliance with environmental regulations or operating permits or authorizations, so long as Cedar diligently corrects the situation to bring its operation back into compliance or seeks regulatory relief if it is unable to correct such situation.

(b) Bankruptcy, Insolvency, etc Either party may immediately terminate this Agreement by written notice if the other party enters into or is placed in bankruptcy or receivership, becomes insolvent or makes an assignment for the benefit of its creditors.

16. Continuing Obligations

Obligations of either party which have accrued (except as otherwise provided) accruing hereunder prior to the expiration or termination hereof shall survive such expiration or termination. The provision of Sections 6, 7, and 10 shall survive any such expiration or termination, and the provisions of Section 9 shall survive for the period stated in Section 9(f).

17. Waiver

Any party's waiver of any breach, or failure to enforce any of the terms and conditions of this Agreement, at any time, shall not in any way affect, limit or waive such party's right thereafter to enforce and compel strict compliance with every term and condition hereof.

18. Applicable Law

The validity, interpretation and effect of this Agreement will be governed exclusively by the laws of the Commonwealth of Pennsylvania, without regard to its conflict of laws provisions.

19. Arbitration

If a dispute arises between the parties relating to this Agreement, the parties agree to use the following procedure prior to either party pursuing other available remedies:

(a) A meeting shall be held promptly between the parties, attended by individuals with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute.

(b) If, within 30 days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will jointly appoint a mutually acceptable neutral person not affiliated with either of the parties (the "neutral"), seeking assistance in such regard from the Center for Public Resources if they have been unable to agree upon such appointment within 40 days from the initial meeting. The fees of the neutral shall be shared equally by the parties.

(c) In consultation with the neutral, the parties will select or devise an alternative dispute resolution procedure ("ADR") by which they will attempt to resolve the dispute, and a time and place for the ADR to be held, with the neutral making the decision as to the procedure and/or place and time (but unless circumstances require otherwise, not later than 60 days after selection of the neutral) if the parties have been unable to agree on any of such matters within 20 days after initial consultation with the neutral.

(d) The parties agree to participate in good faith in the ADR to its conclusion as designated by the neutral. If the parties are not successful in resolving the dispute through the ADR, then the parties agree that either party may initiate litigation upon seven days written notice to the other party.

20. Entirety

This document, including its appendices, constitutes the full understanding of the parties and a complete and exclusive statement of the terms of their agreement on the subject matter hereof. No terms, conditions, understanding or agreement purporting to modify or vary the term of this Agreement shall be binding unless hereafter made in writing and signed by the party to be bound. No modification shall be affected by the acknowledgment or acceptance of purchase order or shipping instruction forms containing terms or conditions at variance with those set forth herein.

21. Independent Contractor

In performing its services hereunder, Cedar shall act as an independent contractor and shall have no authority to represent or bind FMC.

22. Notices

All notices required or permitted to be given under this Agreement shall be in writing and shall be sent by overnight courier service with a duplicate of such notice communicated by fax to the other party, and shall be deemed effective when received. Any such notices shall be addressed to the receiving party at such party's address set forth above, or at such other address as may from time to time be furnished by similar notice by either party.

If to Cedar:

Geoffrey L. Pratt  
Vice President/  
Custom Manufacturing  
Cedar Chemical Corporation  
24th Floor, Clark Tower  
Memphis, TN 38137

If to FMC:

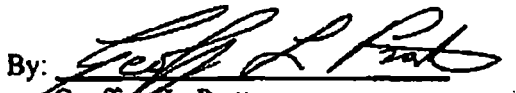
Chester R. Fox  
Manufacturing Technical  
Director  
FMC Corporation  
Agricultural Chemical Group  
1735 Market Street  
Philadelphia, PA 19103

23 Headings

The captions of the various Sections of this Agreement have been inserted only for convenience of reference, and shall not be deemed to modify, explain, enlarge or restrict any provision of this Agreement or affect construction hereof.

**IN WITNESS HEREOF**, the parties have executed this Agreement as of the year and date first written above.

**CEDAR CHEMICAL CORPORATION.**

By:   
Geoffrey L. Pratt  
Vice President, Contract Manufacturing

**FMC CORPORATION**

By:   
William H. Schumann III  
Vice President & Group Manager  
Agricultural Products Group

**EXHIBIT LIST**

**FMC-CEDAR AGREEMENT**

<b>Appendix A</b>	<b>Product and Recovered DMF Solvent Specifications</b>
<b>Appendix B</b>	<b>Methods of Analysis for Product and Recovered DMF Solvent</b>
<b>Appendix C</b>	<b>Containers and Labels</b>
<b>Appendix D</b>	<b>Raw Materials Specifications and Methods of Analysis</b>
<b>Appendix E</b>	<b>Intermediate Product Specifications and Methods of Analysis</b>
<b>Appendix F</b>	<b>Letter of Intent, as amended</b>
<b>Exhibit 1</b>	<b>Unit #1 Description</b>
<b>Exhibit 2</b>	<b>FMC's Product Process</b>
<b>Exhibit 3</b>	<b>Detailed Cost Estimate for Capital Improvements</b>
<b>Exhibit 4</b>	<b>Items of Equipment which FMC May Remove at Expiration of Agreement</b>
<b>Exhibit 5</b>	<b>Pre-Start Up Testing of Unit # 1</b>
<b>Exhibit 6</b>	<b>Consent Order and Agreement with EPA</b>

**ORIGINAL**

## **Appendix A: Product and Recovered DMF Solvent Specifications**

**ORIGINAL**

**Appendix B: Methods of Analysis for Product and Recovered DMF Solvent**



**ORIGINAL**

### **Appendix C: Containers and Labels**

**Product and Recovered DMF Solvent will be shipped in bulk containers and will have the proper DOT approved placards**

**ORIGINAL**

## **Appendix D: Raw Material Specifications and Methods of Analysis**

ORIGINAL

## Appendix E: Intermediate Product Specifications and Methods of Analysis

**ORIGINAL**

**Appendix F: Letter of Intent as Amended**

ORIGINAL

**Exhibit 1: Unit #1 Description**

**ORIGINAL**

**Exhibit 2: FMC Process Information**

**ORIGINAL**

**Exhibit 3: Detailed Cost Estimate**

**Exhibit 4: Items of Equipment which FMC May Remove at Expiration of Agreement**

1. Hastelloy Reactor, 4000 gallon, with Hastelloy Agitator (Called Unit #??)
2. Hastelloy Basket Centrifuge, 48 inch diameter (Called Unit \$ ??)



### **Exhibit 5: Pre-startup Testing of Unit #1**

**Mechanical Completion is defined as having all mechanical and piping systems installed with leak and non-destructive testing completed for all systems. All electrical and instrumentation systems are installed with continuity tests performed for all electrical/instrument (E/I) items and with all E/I loop and motor tests performed from the control console and corrected. Insulation is at a minimum 90% complete with the areas remaining not posing a threat to the safety of the start-up. Mechanical Completion, including correction of punchlist items, will allow system water and solvent testing to proceed.**

**The pre-startup testing will occur after Mechanical Completion and the pre-startup testing will consist of water batching and/or solvent batching.**

ORIGINAL

**Exhibit 6: Consent Order and Agreement with EPA**

## DV Acid Chloride

### Raw materials

Thionyl Chloride

Caustic Soda

Hydrochloric acid

Heptane

Dimethyl formide

## Cypermethrin

### Raw Material

Heptane

Meta - Phosphorylbenzaldehyde

Sodium Cyanide

Triethylene Diamine

Sodium Carbonate

DV ~~Chloride~~ Acid chloride

Caustic